OM nucleic - nucleic search, using sw model

Run on: May 11, 2006, 03:15:27 ; Search time 1774 Seconds
(without alignments)
11728.957 Million cell updates/sec

Title: US-10-760-320A-102
Perfect score: 3122
Sequence: 1 actagaggtggggttagcgc.....acagagcaagactctgtctc 3122

Scoring table: OLIGO_NUC
Gapop 60.0 , Gapext 60.0

Searched: 4996997 seqs, 3332346308 residues

Word size : 1

Total number of hits satisfying chosen parameters: 9993364

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 500 summaries

Database : N_Geneseq_21:*
1: geneseqn1980s:*
2: geneseqn1990s:*
3: geneseqn2000s:*
4: geneseqn2001as:*
5: geneseqn2001bs:*
6: geneseqn2002as:*
7: geneseqn2002bs:*
8: geneseqn2003as:*
9: geneseqn2003bs:*
10: geneseqn2003cs:*
11: geneseqn2003ds:*
12: geneseqn2004as:*
13: geneseqn2004bs:*
14: geneseqn2005s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	3122	100.0	3122	12	ADQ62941	Adq62941 Novel hum
	2	1952	62.5	2327	13	ADR07462	Adr07462 Full leng
c	3	1009	32.3	1009	4	AAK83424	Aak83424 Human imm
c	4	1009	32.3	1009	4	AAK83423	Aak83423 Human imm
c	5	907	29.1	1009	4	AAK83422	Aak83422 Human imm
	6	748	24.0	850	5	AAS93728	Aas93728 DNA encod
c	7	657	21.0	708	12	ACH87504	Ach87504 Human gen
c	8	524	16.8	524	12	ACH73793	Ach73793 Human gen
c	9	504	16.1	973	4	AAK62785	Aak62785 Human imm
c	10	471	15.1	476	4	AAK83430	Aak83430 Human imm
c	11	471	15.1	476	4	AAK83427	Aak83427 Human imm
c	12	427	13.7	476	4	AAK83426	Aak83426 Human imm
c	13	241	7.7	1349	5	AAS72508	Aas72508 DNA encod
	14	60	1.9	60	6	ABN50582	Abn50582 Human spl
c	15	53	1.7	175737	6	ABK83571	Abk83571 Human cDN
c	16	53	1.7	175737	10	ADL13596	Adl13596 Osteoarth
c	17	53	1.7	175737	12	ADQ18934	Adq18934 Human sof
c	18	52	1.7	381	3	AAC03795	Aac03795 Human sec
c	19	52	1.7	1437	5	AAS78337	Aas78337 DNA encod
c	20	52	1.7	9620	4	AAL06207	Aal06207 Human rep
	21	52	1.7	92139	6	AAD31364	Aad31364 92Kb gene
c	22	52	1.7	130320	10	ADF11613	Adf11613 Human scl
	23	52	1.7	220756	12	ADG86300	Adg86300 Human SMR
	24	52	1.7	233380	11	ACN44282	Acn44282 Human gen
c	25	51	1.6	832	3	AAF21833	Aaf21833 Human bre
	26	51	1.6	2791	5	AAS93730	Aas93730 DNA encod
c	27	51	1.6	23139	14	AEA61112	Aea61112 Human SLC
	28	51	1.6	30393	4	AAK67239	Aak67239 Human imm
c	29	51	1.6	68200	14	ADX80722	Adx80722 Human man
c	30	51	1.6	215221	11	ACN44754	Acn44754 Human gen
c	31	50	1.6	255	3	AAC24464	Aac24464 Human sec
	32	50	1.6	288	12	ADN41748	Adn41748 Novel hum
	33	50	1.6	301	4	AAK84092	Aak84092 Human imm
	34	50	1.6	432	5	AAS93725	Aas93725 DNA encod
	35	50	1.6	1001	13	ADQ81170	Adq81170 Human phe
	36	50	1.6	2407	6	ABS58182	Abs58182 cDNA enco
	37	50	1.6	8705	5	ABA82624	Aba82624 Human HBM
	38	50	1.6	8705	8	ACC45365	Acc45365 Human HBM
	39	50	1.6	8705	10	ADB98065	Adb98065 HBM-relat
	40	50	1.6	8705	10	ADE82434	Ade82434 Human DNA
	41	50	1.6	8705	13	ADR16928	Adr16928 BAC clone
	42	50	1.6	8705	13	ADR47579	Adr47579 BAC clone
	43	50	1.6	8705	14	AEB69308	Aeb69308 Human Hig
	44	50	1.6	10396	4	AAK86119	Aak86119 Human imm
	45	50	1.6	11234	5	ABA20857	Aba20857 Human ner
c	46	50	1.6	13026	4	AAK80184	Aak80184 Human imm
c	47	50	1.6	13026	4	AAK80185	Aak80185 Human imm
c	48	50	1.6	31474	4	AAL05461	Aal05461 Human rep
c	49	50	1.6	31474	4	ABL98314	Abl98314 Human tes
c	50	50	1.6	32189	5	AAS30115	Aas30115 Human lun
c	51	50	1.6	32189	10	ADB33452	Adb33452 Human nov
c	52	50	1.6	32193	4	AAD16595	Aad16595 Human nov
c	53	50	1.6	32193	4	AAL36258	Aal36258 Human mus
c	54	50	1.6	32193	8	ABX59246	Abx59246 cDNA enco
c	55	50	1.6	32193	10	ADG62943	Adg62943 Genomic D
c	56	50	1.6	32193	12	ADJ29996	Adj29996 Human mus
c	57	50	1.6	32221	5	AAS30113	Aas30113 Human lun
c	58	50	1.6	32221	10	ADB33450	Adb33450 Human nov
	59	50	1.6	36305	6	ABK22783	Abk22783 Human hig
c	60	50	1.6	66973	11	ACN44230	Acn44230 Human gen
	61	50	1.6	156843	11	ACN44786	Acn44786 Human gen
	62	50	1.6	276820	11	ADP75188	Adp75188 Human ADA
c	63	49	1.6	95	4	AAK77204	Aak77204 Human imm
c	64	49	1.6	95	4	AAK77203	Aak77203 Human imm
c	65	49	1.6	272	4	AAK86736	Aak86736 Human imm
c	66	49	1.6	281	4	AAK86737	Aak86737 Human imm
	67	49	1.6	21477	4	AAK66626	Aak66626 Human imm
c	68	49	1.6	85920	14	ADZ13418	Adz13418 Human can
c	69	49	1.6	243428	12	ADF51132	Adf51132 Human P-R
c	70	48	1.5	4316	4	AAK82458	Aak82458 Human imm
c	71	48	1.5	4316	4	AAK82461	Aak82461 Human imm
c	72	48	1.5	4317	4	AAK82456	Aak82456 Human imm
	73	48	1.5	52242	9	ADA02666	Ada02666 Human MDM
	74	48	1.5	52242	10	ADB72404	Adb72404 Human MDM
	75	48	1.5	52242	10	ADE95914	Ade95914 Human MDM
c	76	48	1.5	53779	14	AEA61175	Aea61175 Human ENT
	77	48	1.5	181684	11	ACN44374	Acn44374 Human gen
	78	47	1.5	440	5	ABV16331	Abv16331 Human pro
	79	47	1.5	516	5	ABV46129	Abv46129 Human pro
	80	47	1.5	125515	10	ADL13941	Adl13941 Osteoarth
c	81	46	1.5	380	14	ADW06065	Adw06065 Human gen
c	82	46	1.5	405	6	ABL83398	Abl83398 Human ova
c	83	46	1.5	458	5	ADL43370	Adl43370 Human ova
	84	46	1.5	497	5	ABV60535	Abv60535 Human pro
c	85	46	1.5	2537	4	AAH18284	Aah18284 Human cDN
	86	46	1.5	6530	14	ADY15647	Ady15647 DNA encod
c	87	46	1.5	7001	10	ACC82887	Acc82887 Human thy
	88	46	1.5	13409	4	AAL06913	Aal06913 Human rep
	89	46	1.5	13409	4	ABA08135	Aba08135 Human ova
	90	46	1.5	18501	4	ABK43029	Abk43029 Genomic s
	91	46	1.5	18501	9	ADB61185	Adb61185 Connectiv
c	92	46	1.5	18501	10	ADC21019	Adc21019 Human sec

c 93	46	1.5	18501	10	ABT17021	Abt17021 Human sec
c 94	46	1.5	18501	10	ABZ68161	Abz68161 Human sec
c 95	46	1.5	25001	12	ADI81379	Adi81379 Human P2X
c 96	46	1.5	28616	12	ADH36221	Adh36221 Human pur
c 97	46	1.5	58000	14	ADZ42284	Adz42284 Human Klo
c 98	46	1.5	58922	13	ABD33407	Abd33407 Human can
99	46	1.5	70271	14	ADZ12540	Adz12540 Human can
100	46	1.5	96594	10	ADE95974	Ade95974 Human SYK
101	46	1.5	96595	9	ADA02726	Ada02726 Human SYK
102	46	1.5	96595	10	ADB72464	Adb72464 Human SYK
c 103	46	1.5	99100	12	ADO56274	Ado56274 Human cyc
c 104	46	1.5	99250	14	ADX80723	Adx80723 Human cyc
105	46	1.5	109661	12	ADQ97818	Adq97818 Human can
c 106	46	1.5	110000	10	ADG70447_1	Continuation (2 of
c 107	46	1.5	110000	10	ABZ79565_1	Continuation (2 of
108	46	1.5	110000	14	ADZ13631_0	Adz13631 Human can
109	46	1.5	110000	14	ADZ13620_0	Adz13620 Human can
c 110	46	1.5	110000	14	ADZ13747_2	Continuation (3 of
111	46	1.5	117962	8	AAD54480	Aad54480 Human CIP
112	46	1.5	141463	11	ACN43862	Acn43862 Human gen
c 113	46	1.5	144792	10	ADC87620	Adc87620 Human GPC
c 114	46	1.5	164772	10	ADL13904	Adl13904 Osteoarth
115	46	1.5	168821	11	ACN44262	Acn44262 Human gen
116	46	1.5	177866	10	ADL13935	Adl13935 Osteoarth
117	46	1.5	181257	12	ADF69677	Adf69677 Human SLC
118	46	1.5	188888	6	ABQ75562	Abq75562 Human rel
c 119	46	1.5	193672	10	ADL13570	Adl13570 Osteoarth
120	46	1.5	256157	11	ACN44650	Acn44650 Human gen
121	46	1.5	256157	13	ABD33570	Abd33570 Human can
122	46	1.5	276276	11	ACN44350	Acn44350 Human gen
c 123	46	1.5	347814	12	ADQ59440	Adq59440 Human can
c 124	45	1.4	145	4	AAS27638	Aas27638 DNA encod
125	45	1.4	145	4	AAK68506	Aak68506 Human imm
126	45	1.4	145	4	AAK69250	Aak69250 Human imm
127	45	1.4	145	4	ABK44042	Abk44042 Genomic D
c 128	45	1.4	145	10	ADB94441	Adb94441 Novel hum
129	45	1.4	145	12	ADI55027	Adi55027 Novel hum
130	45	1.4	492	9	ACH37117	Ach37117 Human end
c 131	45	1.4	568	4	AAH13294	Aah13294 Human cDN
132	45	1.4	601	14	AEB33439	Aeb33439 Human DNA
133	45	1.4	1664	4	AAK63029	Aak63029 Human imm
134	45	1.4	2219	4	AAK69886	Aak69886 Human imm
135	45	1.4	2219	4	AAK69885	Aak69885 Human imm
c 136	45	1.4	2219	4	AAK86256	Aak86256 Human imm
c 137	45	1.4	2219	4	AAK86257	Aak86257 Human imm
138	45	1.4	2491	13	ADR07058	Adr07058 Full leng
139	45	1.4	3977	4	AAH18230	Aah18230 Human cDN
c 140	45	1.4	4513	4	AAK69446	Aak69446 Human imm
c 141	45	1.4	6565	4	AAL03041	Aal03041 Human rep
c 142	45	1.4	6565	4	AAL03042	Aal03042 Human rep
c 143	45	1.4	6565	4	ABL97378	Abl97378 Human tes
c 144	45	1.4	6565	4	ABL97377	Abl97377 Human tes
145	45	1.4	16595	2	AAX23521	Aax23521 Human kid
146	45	1.4	17581	4	AAS36670	Aas36670 Human car
147	45	1.4	17581	4	AAK83984	Aak83984 Human imm
148	45	1.4	17581	10	ADE47364	Ade47364 Human car
149	45	1.4	17581	13	ADJ08782	Adj08782 Human car
150	45	1.4	17946	4	AAS36812	Aas36812 Human car
151	45	1.4	17946	5	ABA15608	Aba15608 Human ner
152	45	1.4	17946	10	ADE47506	Ade47506 Human car
153	45	1.4	17946	13	ADJ08924	Adj08924 Human car
154	45	1.4	23694	11	ACN45138	Acn45138 Human gen
155	45	1.4	31116	11	ACN44954	Acn44954 Human gen
156	45	1.4	31279	14	ADZ13255	Adz13255 Human can
157	45	1.4	32706	11	ACN45014	Acn45014 Human gen
c 158	45	1.4	36534	11	ADL82795	Adl82795 Human sem
c 159	45	1.4	38678	14	AEB32373	Aeb32373 Human gen
c 160	45	1.4	38684	14	AEB32391	Aeb32391 Human gen
161	45	1.4	39566	12	ADN31618	Adn31618 Human squ
162	45	1.4	40090	8	ABX14652	Abx14652 Human gen
163	45	1.4	40090	12	ADN96863	Adn96863 Novel hum
c 164	45	1.4	57105	14	ADZ13149	Adz13149 Human can
165	45	1.4	57248	6	ABK83563	Abk83563 Human cDN
166	45	1.4	65277	13	ABD32902	Abd32902 Human can
c 167	45	1.4	73995	11	ACN43986	Acn43986 Human gen
168	45	1.4	78539	8	ACA64942	Aca64942 Human FRA
c 169	45	1.4	89900	12	ADO79404	Ado79404 DPF3 regi
c 170	45	1.4	107543	13	ABD33524	Abd33524 Human can
c 171	45	1.4	107745	13	ABD33242	Abd33242 Human can
172	45	1.4	110000	6	ABL57909_2	Continuation (3 of
c 173	45	1.4	110000	6	ABX08336_03	Continuation (4 of
c 174	45	1.4	110000	8	AAD53224_2	Continuation (3 of
c 175	45	1.4	110000	12	ADJ25985_03	Continuation (4 of
c 176	45	1.4	110000	12	ADN97989_03	Continuation (4 of
c 177	45	1.4	110000	12	ADO50281_03	Continuation (4 of
c 178	45	1.4	110000	14	AEB85185_03	Continuation (4 of
179	45	1.4	116561	12	ADQ17592	Adq17592 Human sof
180	45	1.4	122748	6	ABT10719	Abt10719 Human bre
c 181	45	1.4	129588	10	ADL13909	Adl13909 Osteoarth
c 182	45	1.4	149671	6	ABK84797	Abk84797 Human cDN
c 183	45	1.4	149671	9	ADB70361	Adb70361 Moesin cD
c 184	45	1.4	149671	12	ADJ37140	Adj37140 Human mal
185	45	1.4	171398	14	ADZ13359	Adz13359 Human can
186	45	1.4	190117	10	ADL13780	Adl13780 Osteoarth
187	45	1.4	191584	13	ABD33586	Abd33586 Human can
188	45	1.4	191584	13	ADR67026	Adr67026 Human can
c 189	45	1.4	285300	14	ADX98573	Adx98573 Human D4,
190	45	1.4	300000	10	ADE86352	Ade86352 Human PTP
191	45	1.4	300001	12	ADO14076	Ado14076 Human pro
192	44	1.4	116	12	ADJ12734	Adj12734 DNA fragm
193	44	1.4	126	4	AAK67381	Aak67381 Human imm
c 194	44	1.4	139	4	AAK74457	Aak74457 Human imm
c 195	44	1.4	145	3	AAC21835	Aac21835 Human sec
196	44	1.4	182	4	AAK91189	Aak91189 Human dig
197	44	1.4	182	5	AAS32121	Aas32121 Human liv
198	44	1.4	182	6	ABN90476	Abn90476 Human liv
199	44	1.4	182	11	ADJ15389	Adj15389 Human liv
c 200	44	1.4	307	4	AAK87671	Aak87671 Human imm
201	44	1.4	330	3	AAC24230	Aac24230 Human sec
202	44	1.4	406	4	AAI81664	Aai81664 Human pol
203	44	1.4	426	6	ABL66717	Abl66717 Lung canc
c 204	44	1.4	466	4	AAH12789	Aah12789 Human cDN
205	44	1.4	477	4	AAK58136	Aak58136 Human imm
206	44	1.4	611	4	ABA08715	Aba08715 Human sec
207	44	1.4	956	3	AAC57422	Aac57422 Arachidon
208	44	1.4	2845	4	AAH14978	Aah14978 Human cDN
209	44	1.4	2845	6	AAD36783	Aad36783 Human pur
c 210	44	1.4	3164	12	ADQ62869	Adq62869 Novel hum
211	44	1.4	3408	12	ADQ64854	Adq64854 Novel hum
c 212	44	1.4	3749	4	AAK77869	Aak77869 Human imm
c 213	44	1.4	3749	4	AAK72209	Aak72209 Human imm
214	44	1.4	5307	4	AAD16632	Aad16632 Human nov
215	44	1.4	5307	10	AAD62076	Aad62076 Human sec
216	44	1.4	5307	10	AAD62078	Aad62078 Human sec
c 217	44	1.4	6076	14	ADY15164	Ady15164 DNA encod
c 218	44	1.4	6467	13	ADR24154	Adr24154 Breast ca
c 219	44	1.4	6467	13	ADP24723	Adp24723 PRO polyp
c 220	44	1.4	7720	5	AAC91210	Aac91210 Human fol
c 221	44	1.4	7720	6	ABL68258	Abl68258 Kidney ca
c 222	44	1.4	7720	6	ABL66279	Abl66279 Lung canc
c 223	44	1.4	7720	6	ABL68540	Abl68540 Kidney ca
c 224	44	1.4	7720	6	ABL68876	Abl68876 Kidney ca
c 225	44	1.4	7720	6	ABL65636	Abl65636 Lung canc
c 226	44	1.4	7720	14	AEA63661	Aea63661 Folate re
227	44	1.4	7815	4	AAK89492	Aak89492 Human dig
c 228	44	1.4	9049	4	AAK77870	Aak77870 Human imm
c 229	44	1.4	9049	4	AAK77871	Aak77871 Human imm
c 230	44	1.4	9049	4	AAK72210	Aak72210 Human imm
c 231	44	1.4	9049	4	AAK72211	Aak72211 Human imm
232	44	1.4	9406	5	ABA15920	Aba15920 Human ner
c 233	44	1.4	11787	10	ADB54007	Adb54007 MSH4 geno
234	44	1.4	11872	4	AAK84027	Aak84027 Human imm
235	44	1.4	11872	4	AAK66893	Aak66893 Human imm
c 236	44	1.4	13789	8	ABZ73944	Abz73944 Secreted
c 237	44	1.4	13789	10	ADC20691	Adc20691 Human sec
238	44	1.4	16235	4	AAK86192	Aak86192 Human imm

	239	44	1.4	20674	3	AAC58017 Aac58017 Arachidon
	240	44	1.4	23943	12	ADQ97942 Adq97942 Human can
	241	44	1.4	23996	5	ABA18618 Aba18618 Human ner
c	242	44	1.4	24964	6	ABK86595 Abk86595 Human SA
c	243	44	1.4	27317	11	ACN45058 Acn45058 Human gen
	244	44	1.4	29832	5	ADM20207 Adm20207 Alternati
	245	44	1.4	31808	10	ADC86002 Adc86002 Human GPC
	246	44	1.4	32134	4	AAI99172 Aai99172 Human exc
	247	44	1.4	32134	5	AAI63522 Aai63522 Human kid
	248	44	1.4	35100	4	AAK69767 Aak69767 Human imm
	249	44	1.4	35100	4	AAK65700 Aak65700 Human imm
	250	44	1.4	35115	4	AAK69766 Aak69766 Human imm
	251	44	1.4	35115	4	AAK65699 Aak65699 Human imm
c	252	44	1.4	38186	2	AAZ32028 Aaz32028 Human MET
c	253	44	1.4	38186	5	AAC90085 Aac90085 AC004449
c	254	44	1.4	38374	6	ABL68824 Abl68824 Kidney ca
c	255	44	1.4	38374	6	ABL68363 Abl68363 Kidney ca
c	256	44	1.4	38374	6	ABL68364 Abl68364 Kidney ca
c	257	44	1.4	38374	6	ABN96966 Abn96966 Gene #346
c	258	44	1.4	39119	8	ABZ74034 Abz74034 Secreted
c	259	44	1.4	39119	8	ADA98641 Ada98641 Human sec
c	260	44	1.4	39119	10	ADC20764 Adc20764 Human sec
c	261	44	1.4	39119	10	ABZ67621 Abz67621 Human sec
c	262	44	1.4	46404	11	ACN44270 Acn44270 Human gen
c	263	44	1.4	50602	11	ACN44146 Acn44146 Human gen
c	264	44	1.4	58822	9	ADA02540 Ada02540 Human TCO
c	265	44	1.4	58822	10	ADB72278 Adb72278 Human TCO
c	266	44	1.4	58822	10	ADE95788 Ade95788 Human TCO
	267	44	1.4	60057	11	ACN44314 Acn44314 Human gen
	268	44	1.4	72705	11	ACN45158 Acn45158 Human gen
	269	44	1.4	81369	3	AAA97997 Aaa97997 Human T g
c	270	44	1.4	88208	14	ADZ13389 Adz13389 Human can
c	271	44	1.4	88445	13	ABD33536 Abd33536 Human can
	272	44	1.4	101270	12	ADQ17814 Adq17814 Human sof
c	273	44	1.4	103375	13	ABD32761 Abd32761 Human can
c	274	44	1.4	110000	11	ACN44150_0 Acn44150 Human gen
c	275	44	1.4	110000	13	ABD32780_0 Abd32780 Human can
c	276	44	1.4	110000	14	ADZ45062_01 Continuation (2 of
c	277	44	1.4	111084	12	ADQ18808 Adq18808 Human sof
c	278	44	1.4	112460	6	ABK83567 Abk83567 Human cDN
	279	44	1.4	113585	12	ADJ19197 Adj19197 Human int
c	280	44	1.4	117754	11	ACN43866 Acn43866 Human gen
c	281	44	1.4	121434	12	ADN30326 Adn30326 Human Not
c	282	44	1.4	121434	14	AEA08528 Aea08528 Human Not
	283	44	1.4	125439	6	ABQ88177 Abq88177 Human ost
c	284	44	1.4	138941	8	ACC79695 Acc79695 Human tum
c	285	44	1.4	139257	10	ADC89520 Adc89520 Human COR
c	286	44	1.4	139573	10	ADH58564 Adh58564 Human Na+
	287	44	1.4	149612	11	ACN45154 Acn45154 Human gen
c	288	44	1.4	156416	13	ABD32817 Abd32817 Human can
c	289	44	1.4	160361	12	ADL08116 Adl08116 Human gen
	290	44	1.4	161531	13	ABD33232 Abd33232 Human can
c	291	44	1.4	175077	11	ACN44626 Acn44626 Human gen
c	292	44	1.4	178896	6	ABQ88146 Abq88146 Human ost
c	293	44	1.4	188888	6	ABQ75562 Abq75562 Human rel
c	294	44	1.4	191010	12	ADO25291 Ado25291 Human pro
	295	44	1.4	220895	6	ABK84798 Abk84798 Human cDN
	296	44	1.4	220895	13	ADR52737 Adr52737 Drug ther
c	297	44	1.4	302603	11	ADP75187 Adp75187 Human End
	298	43	1.4	95	4	AAK70695 Aak70695 Human imm
c	299	43	1.4	117	3	AAC13649 Aac13649 Human sec
	300	43	1.4	120	4	AAK70692 Aak70692 Human imm
c	301	43	1.4	149	4	AAK65042 Aak65042 Human imm
	302	43	1.4	153	4	AAK66030 Aak66030 Human imm
	303	43	1.4	216	4	AAK73056 Aak73056 Human imm
	304	43	1.4	288	4	AAK68373 Aak68373 Human imm
	305	43	1.4	288	4	AAK73436 Aak73436 Human imm
	306	43	1.4	295	4	AAS36158 Aas36158 Human car
	307	43	1.4	295	10	ADE46852 Ade46852 Human car
	308	43	1.4	295	13	ADJ08270 Adj08270 Human car
c	309	43	1.4	300	4	AAK71675 Aak71675 Human imm
c	310	43	1.4	302	4	AAK71674 Aak71674 Human imm
	311	43	1.4	309	5	ABV46991 Abv46991 Human pro
	312	43	1.4	318	5	ABA18466 Aba18466 Human ner
	313	43	1.4	354	12	ADN41689 Adn41689 Novel hum
	314	43	1.4	356	12	ADN41682 Adn41682 Novel hum
	315	43	1.4	362	4	AAK56485 Aak56485 Human imm
c	316	43	1.4	365	3	AAC16959 Aac16959 Human sec
	317	43	1.4	458	5	ABV50974 Abv50974 Human pro
	318	43	1.4	459	9	ACH41651 Ach41651 Human foe
	319	43	1.4	462	4	AAI91684 Aai91684 Human pol
	320	43	1.4	490	9	ACH47659 Ach47659 Human inf
	321	43	1.4	502	5	ABV51461 Abv51461 Human pro
c	322	43	1.4	503	4	ABK41982 Abk41982 cDNA enco
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	324	43	1.4	538	4	AAI86635 Aai86635 Human pol
c	325	43	1.4	600	4	AAK71676 Aak71676 Human imm
c	326	43	1.4	601	8	ABX61824 Abx61824 Novel hum
c	327	43	1.4	601	8	ABX61823 Abx61823 Novel hum
c	328	43	1.4	608	5	ABV57704 Abv57704 Human pro
c	329	43	1.4	705	4	AAH08193 Aah08193 Human cDN
c	330	43	1.4	1093	11	ACN88614 Acn88614 Breast ca
c	331	43	1.4	1155	6	AAL39976 Aal39976 Lung-spec
	332	43	1.4	1275	4	AAK65471 Aak65471 Human imm
c	333	43	1.4	1467	4	ABA09083 Aba09083 Human nov
	334	43	1.4	1653	4	AAK83983 Aak83983 Human imm
c	335	43	1.4	1839	4	AAH16607 Aah16607 Human cDN
c	336	43	1.4	2263	13	ADV99508 Adv99508 NIH/3T3 c
c	337	43	1.4	2263	13	ADV99509 Adv99509 NIH/3T3 c
	338	43	1.4	2273	6	ABA01629 Aba01629 Human RNA
c	339	43	1.4	2506	13	ADQ39021 Adq39021 Human SNP
c	340	43	1.4	2825	11	ACN92637 Acn92637 Breast ca
	341	43	1.4	3465	14	ADW78757 Adw78757 Human his
c	342	43	1.4	3512	10	ADL13657 Adl13657 Osteoarth
c	343	43	1.4	3757	13	ADQ39023 Adq39023 Human SNP
	344	43	1.4	3870	8	ABZ42676 Abz42676 Human his
	345	43	1.4	3870	14	ADW78755 Adw78755 Human his
	346	43	1.4	3870	14	ADY15583 Ady15583 DNA encod
	347	43	1.4	4182	4	AAH26524 Aah26524 Human pro
	348	43	1.4	4289	13	ACN42409 Acn42409 Human dia
	349	43	1.4	4307	13	ACN42407 Acn42407 Human dia
	350	43	1.4	4321	13	ACN42408 Acn42408 Human dia
	351	43	1.4	5069	4	AAK67404 Aak67404 Human imm
	352	43	1.4	5232	2	AAV55038 Aav55038 Human XIA
	353	43	1.4	5856	10	ACF63378 Acf63378 Human his
	354	43	1.4	6491	5	ADM20191 Adm20191 Alternati
	355	43	1.4	8763	4	AAK89468 Aak89468 Human dig
	356	43	1.4	8948	4	AAK73054 Aak73054 Human imm
	357	43	1.4	9120	12	ADN11326 Adn11326 Human kal
	358	43	1.4	9120	13	ADR72634 Adr72634 Human ren
	359	43	1.4	9120	13	ADR72892 Adr72892 Human ova
	360	43	1.4	9120	14	ADY67601 Ady67601 Human kal
c	361	43	1.4	9253	5	ABA15922 Aba15922 Human ner
	362	43	1.4	9253	5	ABA16201 Aba16201 Human ner
	363	43	1.4	9474	6	ABK50462 Abk50462 Human his
c	364	43	1.4	10695	4	AAK65420 Aak65420 Human imm
c	365	43	1.4	12437	10	AAD64398 Aad64398 Human chr
c	366	43	1.4	12889	4	ABA07412 Aba07412 Human pan
c	367	43	1.4	12889	4	AAK91143 Aak91143 Human dig
c	368	43	1.4	14143	4	ABA07413 Aba07413 Human pan
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	370	43	1.4	17431	4	AAK90339 Aak90339 Human dig
	371	43	1.4	17431	4	AAI57710 Aai57710 Human col
	372	43	1.4	17431	6	ABS99887 Abs99887 Genomic D
	373	43	1.4	17431	10	ADB93040 Adb93040 Human col
	374	43	1.4	17596	4	AAK72852 Aak72852 Human imm
	375	43	1.4	17804	13	ADS36476 Ads36476 Human aut
	376	43	1.4	17809	13	ADS36457 Ads36457 Human aut
c	377	43	1.4	17996	4	AAL36330 Aal36330 Human mus
c	378	43	1.4	17996	8	ABX59318 Abx59318 cDNA enco
c	379	43	1.4	17996	12	ADJ30068 Adj30068 Human mus
	380	43	1.4	18428	13	ADS36477 Ads36477 Human aut
c	381	43	1.4	18664	4	AAK84438 Aak84438 Human imm
c	382	43	1.4	18664	4	AAK65421 Aak65421 Human imm
	383	43	1.4	22452	4	AAS27829 Aas27829 DNA encod
	384	43	1.4	22452	4	AAS27827 Aas27827 DNA encod

	385	43	1.4	22452	10	ADB94632 Adb94632 Novel hum
	386	43	1.4	22452	10	ADB94630 Adb94630 Novel hum
c	387	43	1.4	23181	4	AAK80342 Aak80342 Human imm
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	389	43	1.4	23580	4	AAK83578 Aak83578 Human imm
c	390	43	1.4	23580	4	AAK66230 Aak66230 Human imm
	391	43	1.4	26555	4	AAK68605 Aak68605 Human imm
	392	43	1.4	26555	4	AAK68372 Aak68372 Human imm
	393	43	1.4	26555	4	AAI62833 Aai62833 Human gen
	394	43	1.4	26747	6	AAI67784 Aai67784 Nucleotid
	395	43	1.4	31397	11	ACN44346 Acn44346 Human gen
c	396	43	1.4	32195	4	AAS36105 Aas36105 Human car
c	397	43	1.4	32195	4	AAS31538 Aas31538 Human DNA
c	398	43	1.4	32195	4	AAS31532 Aas31532 Human DNA
c	399	43	1.4	32195	4	ABK44045 Abk44045 Genomic D
c	400	43	1.4	32195	6	ABQ66856 Abq66856 Human pol
c	401	43	1.4	32195	6	ABQ66862 Abq66862 Human pol
c	402	43	1.4	32195	10	ADC11143 Adc11143 Human DNA
c	403	43	1.4	32195	10	ADC11149 Adc11149 Human DNA
c	404	43	1.4	32195	10	ADE46799 Ade46799 Human car
c	405	43	1.4	32195	12	ADI55030 Adi55030 Novel hum
c	406	43	1.4	32195	13	ADJ08217 Adj08217 Human car
	407	43	1.4	32196	5	ABA18857 Aba18857 Human ner
	408	43	1.4	35425	10	ADC87616 Adc87616 Human GPC
	409	43	1.4	36797	6	AAD26830 Aad26830 Human SNA
	410	43	1.4	36797	6	AAD26738 Aad26738 Human syn
	411	43	1.4	37138	10	ADC87688 Adc87688 Human mam
	412	43	1.4	39105	4	AAK81724 Aak81724 Human imm
c	413	43	1.4	40645	8	ABX61804 Abx61804 Genomic D
c	414	43	1.4	40645	9	ADA49717 Ada49717 Genomic D
	415	43	1.4	45864	11	ACN43922 Acn43922 Human gen
c	416	43	1.4	48763	10	ADJ79948 Adj79948 Human kin
c	417	43	1.4	51469	4	AAK78813 Aak78813 Human imm
c	418	43	1.4	51469	4	AAK70270 Aak70270 Human imm
c	419	43	1.4	51469	4	AAK69322 Aak69322 Human imm
c	420	43	1.4	58651	12	ADQ97152 Adq97152 Human can
c	421	43	1.4	59838	11	ACN44982 Acn44982 Human gen
	422	43	1.4	61648	12	ADQ97663 Adq97663 Human can
	423	43	1.4	73771	11	ACN44938 Acn44938 Human gen
c	424	43	1.4	77478	11	ACN44766 Acn44766 Human gen
	425	43	1.4	86000	12	ADP68568 Adp68568 Human PPA
	426	43	1.4	88191	8	ABX14763 Abx14763 Genomic D
	427	43	1.4	91359	13	ABD32673 Abd32673 Human can
c	428	43	1.4	92117	11	ACN44746 Acn44746 Human gen
c	429	43	1.4	93273	9	AAL57580 Aal57580 Human GTP
	430	43	1.4	94719	10	ADE95902 Ade95902 Human STA
	431	43	1.4	94720	9	ADA02654 Ada02654 Human STA
	432	43	1.4	94720	10	ADB72392 Adb72392 Human STA
c	433	43	1.4	96591	10	ADC85301 Adc85301 Mouse Sos
c	434	43	1.4	96592	9	ADA02822 Ada02822 Human SOS
c	435	43	1.4	96592	10	ADB72560 Adb72560 Human SOS
c	436	43	1.4	96592	12	ADM74417 Adm74417 Human car
c	437	43	1.4	99014	6	ABN96931 Abn96931 Gene #342
	438	43	1.4	110000	10	AAL52246_2 Continuation (3 of
	439	43	1.4	110000	11	ACN44150_1 Continuation (2 of
	440	43	1.4	110000	14	ADZ42274_0 Adz42274 Human min
	441	43	1.4	115829	13	ABD33448 Abd33448 Human can
	442	43	1.4	119235	12	ADP03020 Adp03020 Human hou
	443	43	1.4	119241	13	ADS88518 Ads88518 Human hou
	444	43	1.4	119241	13	ADU60136 Adu60136 Housekeep
c	445	43	1.4	121162	3	AAC66548 Aac66548 Human kin
c	446	43	1.4	125439	6	ABQ88177 Abq88177 Human ost
	447	43	1.4	127917	13	ADR52731 Adr52731 Drug ther
c	448	43	1.4	130207	11	ACN44762 Acn44762 Human gen
	449	43	1.4	133893	9	AAD54538 Aad54538 Human pho
	450	43	1.4	135827	13	ABD33219 Abd33219 Human can
	451	43	1.4	136328	6	ABZ35015 Abz35015 Human gen
	452	43	1.4	140352	14	ADZ13610 Adz13610 Human can
	453	43	1.4	143239	12	ADQ17729 Adq17729 Human sof
c	454	43	1.4	144068	13	ABD32888 Abd32888 Human can
c	455	43	1.4	147620	10	ADL13739 Adl13739 Osteoarth
	456	43	1.4	147620	12	ADQ19948 Adq19948 Human sof
c	457	43	1.4	155225	12	ADQ59197 Adq59197 MSI-H car
	458	43	1.4	160552	4	AAD02697 Aad02697 Human gly
c	459	43	1.4	165156	13	ADS36459 Ads36459 Human aut
	460	43	1.4	167343	6	ABL64403 Abl64403 Stomach c
	461	43	1.4	167343	6	ABL67239 Abl67239 Thyroid c
	462	43	1.4	169144	10	ADL13748 Adl13748 Osteoarth
c	463	43	1.4	174493	8	ACA61395 Aca61395 Novel hum
c	464	43	1.4	174493	10	AAD59937 Aad59937 Human kin
c	465	43	1.4	174493	12	ADO40593 Ado40593 Human kin
c	466	43	1.4	201143	6	ABK83568 Abk83568 Human DNA
	467	43	1.4	215221	11	ACN44754 Acn44754 Human gen
c	468	43	1.4	276276	11	ACN44350 Acn44350 Human gen
	469	43	1.4	310268	13	ABD32548 Abd32548 Human can
	470	43	1.4	326002	13	ABD32843 Abd32843 Human can
	471	42	1.3	197	4	AAK65128 Aak65128 Human imm
	472	42	1.3	197	4	AAK65129 Aak65129 Human imm
	473	42	1.3	281	5	ABV49425 Abv49425 Human pro
	474	42	1.3	302	4	AAK83454 Aak83454 Human imm
	475	42	1.3	336	3	AAA16012 Aaa16012 Human col
	476	42	1.3	351	5	ABV19658 Abv19658 Human pro
	477	42	1.3	380	4	AAI90890 Aai90890 Human pol
c	478	42	1.3	394	5	ADI74275 Adi74275 Human ova
c	479	42	1.3	394	5	ADI67898 Adi67898 Human ova
c	480	42	1.3	397	5	ADI74276 Adi74276 Human ova
c	481	42	1.3	397	5	ADI67899 Adi67899 Human ova
c	482	42	1.3	398	5	ADL45526 Adl45526 Human ova
c	483	42	1.3	398	11	ACN91099 Acn91099 Breast ca
c	484	42	1.3	404	4	AAI91924 Aai91924 Human pol
c	485	42	1.3	416	4	AAL13072 Aal13072 Human bre
	486	42	1.3	423	5	ABV53371 Abv53371 Human pro
c	487	42	1.3	441	5	ADL39512 Adl39512 Human ova
c	488	42	1.3	442	5	ADL39513 Adl39513 Human ova
c	489	42	1.3	457	11	ACN87882 Acn87882 Breast ca
	490	42	1.3	458	14	ACL56872 Acl56872 Human col
	491	42	1.3	496	6	ABN63968 Abn63968 Human can
	492	42	1.3	540	4	AAH10129 Aah10129 Human cDN
c	493	42	1.3	559	4	AAH10557 Aah10557 Human cDN
	494	42	1.3	566	4	AAK90902 Aak90902 Human dig
	495	42	1.3	566	5	AAS31937 Aas31937 Human liv
	496	42	1.3	566	6	ABN90292 Abn90292 Human liv
	497	42	1.3	566	11	ADJ15205 Adj15205 Human liv
	498	42	1.3	568	6	ABN60116 Abn60116 Human can
c	499	42	1.3	572	6	AAD34118 Aad34118 Human sec
	500	42	1.3	598	14	ACL58022 Acl58022 Human col

ALIGNMENTS

RESULT 1
ADQ62941
ID ADQ62941 standard; cDNA; 3122 BP.
XX
AC ADQ62941;
XX
DT 07-OCT-2004 (first entry)
XX
DE Novel human cDNA sequence #102.
XX
KW ss; gene; osteopathic; neuroprotective; nootropic; antiparkinsonian;
KW cytostatic; gene therapy; diagnostic marker; morbid state; osteoporosis;
KW neurological disease; Alzheimer's disease; Parkinson's disease; dementia;
KW cancer.
XX
OS Homo sapiens.
XX
PN EP1440981-A2.
XX
PD 28-JUL-2004.
XX
PF 21-JAN-2004; 2004EP-00001196.
XX
PR 21-JAN-2003; 2003JP-00102206.
PR 09-MAY-2003; 2003JP-00131392.

XX
PA (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
PI Yamamoto J, Isono Y, Nagai K, Irie R;
XX
DR WPI; 2004-535376/52.
DR P-PSDB; ADQ65129.
XX
PT Novel 2495 cDNA, useful for treating osteoporosis, neurological diseases,
PT Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.
XX
PS Claim 1; SEQ ID NO 102; 2449pp; English.
XX
CC The invention relates to 2495 novel polynucleotides (I) and their encoded
CC polypeptides, sequences hybridizing to these nucleotides, sequences
CC encoding partial polypeptides and sequences having 70% or 90% identity to
CC the nucleotide and protein sequences. The nucleotides and polypeptides
CC are useful as diagnostic markers or therapeutic target for the diseases
CC or morbid states. They are also useful for treating osteoporosis,
CC neurological diseases, Alzheimer's diseases, Parkinson's diseases,
CC dementia and various cancers. This sequence corresponds to a nucleotide
CC sequence of the invention.
XX
SQ Sequence 3122 BP; 601 A; 891 C; 1019 G; 611 T; 0 U; 0 Other;

Query Match 100.0%; Score 3122; DB 12; Length 3122;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 3122; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 ACTAGAGGTGGGGTTAGCGCTTGGAAGCACCGACCAACGTGAGCGCAACGCGGCAGGGAC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ACTAGAGGTGGGGTTAGCGCTTGGAAGCACCGACCAACGTGAGCGCAACGCGGCAGGGAC 60

Qy         61 ACCTGACCCCGGCGGCGCCCAGCCCCTCGGATTGCCAGTCACTGCTCGCTTTGGGGCACG 120
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Db         61 ACCTGACCCCGGCGGCGCCCAGCCCCTCGGATTGCCAGTCACTGCTCGCTTTGGGGCACG 120

Qy        121 GAGGTGCCCAGTCCTGCGGGGCACCCGACGTCCTGTCGCCGACAGGGTCCGGGAGTCAGT 180
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Db        121 GAGGTGCCCAGTCCTGCGGGGCACCCGACGTCCTGTCGCCGACAGGGTCCGGGAGTCAGT 180

Qy        181 ATAGCTGGGTTCTAGTCCCATCACAGGCAAAAACTCCGCGGGAGCCTGGCCCGCTTTTTA 240
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Db        181 ATAGCTGGGTTCTAGTCCCATCACAGGCAAAAACTCCGCGGGAGCCTGGCCCGCTTTTTA 240

Qy        241 CCTGGGCCTCAGTTTCCCCATCCGTAAAATAGAACGGGTTGGATCTCCCGAGCGCTAACA 300
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Qy        301 TTCCAGAACTCGGATGGGGCGAAGGGGAGGGAGGGATGGGCCACCCACACGTGACCTCCC 360
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Db        301 TTCCAGAACTCGGATGGGGCGAAGGGGAGGGAGGGATGGGCCACCCACACGTGACCTCCC 360

Qy        361 CGCGTGGAGCCCCGCCTACCACTGATCCAGGGGGTGGCAGCTCCGGCCGGGACGAGCGGG 420
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Db        361 CGCGTGGAGCCCCGCCTACCACTGATCCAGGGGGTGGCAGCTCCGGCCGGGACGAGCGGG 420

Qy        421 GTGGGCGGGTCCTAGGAAACCCTACCCGGCCGCCCTTGGCAGCGCCTAAGGCGGAGCGCG 480
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Db        421 GTGGGCGGGTCCTAGGAAACCCTACCCGGCCGCCCTTGGCAGCGCCTAAGGCGGAGCGCG 480

Qy        481 CGGCTCTGCAGCCTGCTTGCCCCGGAGTTGGCACCCACGGAGGATGGGGACCGCACCCTC 540
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Db        481 CGGCTCTGCAGCCTGCTTGCCCCGGAGTTGGCACCCACGGAGGATGGGGACCGCACCCTC 540

Qy        541 AGCTTCGCAGGGAGCCACCGTGGAGGCCAGGGCGGTGCAGAGACACGACGTGTGACTCGG 600
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Db        541 AGCTTCGCAGGGAGCCACCGTGGAGGCCAGGGCGGTGCAGAGACACGACGTGTGACTCGG 600

Qy        601 AGTGCGCCTGGGGAGGATGGACGAGGGAGCGGGGGACCGCTAACGGGGCTCCCTCTGCGC 660
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Db        601 AGTGCGCCTGGGGAGGATGGACGAGGGAGCGGGGGACCGCTAACGGGGCTCCCTCTGCGC 660

Qy        661 GCCCCGTCCGCAGAGGCGCACGTCGAGGGTCCCGGGCGGGCTCCGTGGACGTTGGCGGTA 720
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        661 GCCCCGTCCGCAGAGGCGCACGTCGAGGGTCCCGGGCGGGCTCCGTGGACGTTGGCGGTA 720

Qy        721 GCGCCGAGCGAGTCACGGACCATGAAGAGCGTTCGTGCCGCGCGGCCCAAGGCCGGGATG 780
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        721 GCGCCGAGCGAGTCACGGACCATGAAGAGCGTTCGTGCCGCGCGGCCCAAGGCCGGGATG 780

Qy        781 GGGGTTAGCCACATCCTGCCGCGCTGAGGGGGAGGCTAACGGGCGCGGGCGGCCGGGCCC 840
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        781 GGGGTTAGCCACATCCTGCCGCGCTGAGGGGGAGGCTAACGGGCGCGGGCGGCCGGGCCC 840

Qy        841 AGCCGGAGCCCACCGCGATGGCGAGGGAGGAGTGCAAGGCGCTGCTGGACGGGCTCAACA 900
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        841 AGCCGGAGCCCACCGCGATGGCGAGGGAGGAGTGCAAGGCGCTGCTGGACGGGCTCAACA 900

Qy        901 AGACGACTGCGTGCTACCACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTCGCAGA 960
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        901 AGACGACTGCGTGCTACCACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTCGCAGA 960

Qy        961 ACCTGCGGCAGGAGCTGCAAAAGACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTCCACCT 1020
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        961 ACCTGCGGCAGGAGCTGCAAAAGACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTCCACCT 1020

Qy       1021 GCGCCCGGCTGACTGCTGTGCTGCGCGACCGGGGCCTGGCCGCCGACGAGCGCGCCGAGT 1080
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1021 GCGCCCGGCTGACTGCTGTGCTGCGCGACCGGGGCCTGGCCGCCGACGAGCGCGCCGAGT 1080

Qy       1081 TCGAGCGGCTCTGGGTGGCCTTCTCGGGCTGCCTGGACCTGCTGGAAGCGGACATGCGAC 1140
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1081 TCGAGCGGCTCTGGGTGGCCTTCTCGGGCTGCCTGGACCTGCTGGAAGCGGACATGCGAC 1140

Qy       1141 GCTCGCTGGAGCTGGGCGCCGCGTTCCCGCTGCACGCGCCGCGGCGACCGCTGGTGCGCA 1200
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1141 GCTCGCTGGAGCTGGGCGCCGCGTTCCCGCTGCACGCGCCGCGGCGACCGCTGGTGCGCA 1200

Qy       1201 CAGGTGTGGCTGGCGCCTCCTCCGGCGTGGCGGCGCGCGCGCTGAGCACCCGCAGCCTGC 1260
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1201 CAGGTGTGGCTGGCGCCTCCTCCGGCGTGGCGGCGCGCGCGCTGAGCACCCGCAGCCTGC 1260

Qy       1261 GGCTCGAGGCGGAGGGCGACTTCGACGTCGCGGACCTGCGGGAGCTGGAGCGCGAGGTCC 1320
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1261 GGCTCGAGGCGGAGGGCGACTTCGACGTCGCGGACCTGCGGGAGCTGGAGCGCGAGGTCC 1320

Qy       1321 TTCAGGTGGGCGAGATGATCGACAACATGGAGATGAAGGTCAACGTGCCCCGCTGGACCG 1380
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1321 TTCAGGTGGGCGAGATGATCGACAACATGGAGATGAAGGTCAACGTGCCCCGCTGGACCG 1380

Qy       1381 TGCAAGCCCGGCAGGCGGCGGGCGCCGAGCTCCTGTCCACGGTCAGCGCCGGCCCCTCCT 1440
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1381 TGCAAGCCCGGCAGGCGGCGGGCGCCGAGCTCCTGTCCACGGTCAGCGCCGGCCCCTCCT 1440

Qy       1441 CGGTCGTGTCCTTGCAGGAGCGCGGGGGGGGGTTGCGACCCCAGGAAGGCCCTGGCCGCCA 1500
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1441 CGGTCGTGTCCTTGCAGGAGCGCGGGGGGGGGTTGCGACCCCAGGAAGGCCCTGGCCGCCA 1500

Qy       1501 TCCTTTTCGGCGCCGTGCTGCTGGCGGCTGTGGCCCTAGCCGTGTGCGTGGCGAAGCTGA 1560
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1501 TCCTTTTCGGCGCCGTGCTGCTGGCGGCTGTGGCCCTAGCCGTGTGCGTGGCGAAGCTGA 1560

Qy       1561 GCTGACAGACACCCGACGGCCGCCTGCTGCTGCCGCTCCCTCCCCTGAGAAAAGACTCGG 1620
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1561 GCTGACAGACACCCGACGGCCGCCTGCTGCTGCCGCTCCCTCCCCTGAGAAAAGACTCGG 1620

Qy       1621 GATGGGTGTGGGGTCTGGCCTGTGCAAGGGGAGTGGTCCTAAAACCCCGTGTGTGCATGG 1680
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1621 GATGGGTGTGGGGTCTGGCCTGTGCAAGGGGAGTGGTCCTAAAACCCCGTGTGTGCATGG 1680

Qy       1681 GTACACGCGCGTTTCCAGTGCACATCTGCCTGGGCAGGACACGGTTTTCCTCTTGCTGGC 1740
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1681 GTACACGCGCGTTTCCAGTGCACATCTGCCTGGGCAGGACACGGTTTTCCTCTTGCTGGC 1740
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Qy       1741 CCGGGAGAAGTTAACTTTGCGCCGGCCGTCAGGGCATTACCGCTAACGTCTGCAGGAGCT 1800
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1741 CCGGGAGAAGTTAACTTTGCGCCGGCCGTCAGGGCATTACCGCTAACGTCTGCAGGAGCT 1800

Qy       1801 TTATTCCCTATTAATAGAAAACCGTCACAGTGACCCTAGATCCCTCCGAGTTAATGAGTT 1860
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1801 TTATTCCCTATTAATAGAAAACCGTCACAGTGACCCTAGATCCCTCCGAGTTAATGAGTT 1860

Qy       1861 AACACATGTGCTGTTGGGGCGTCTTTACAGGGAGTCCGAGTTCGGTGCCCACCCCTGCCA 1920
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1861 AACACATGTGCTGTTGGGGCGTCTTTACAGGGAGTCCGAGTTCGGTGCCCACCCCTGCCA 1920

Qy       1921 GCGTCGCCCCCTTTCTGCGTGGGACAGTTTGAAAAGGTGGGTGGGGTGGAGTGAAGTTTG 1980
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1921 GCGTCGCCCCCTTTCTGCGTGGGACAGTTTGAAAAGGTGGGTGGGGTGGAGTGAAGTTTG 1980

Qy       1981 GAGAGGGACGCTGTTTGGTTCTATGTGGTTGGTCTGTTTCCCGGACAAGAAAAATTGCAA 2040
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1981 GAGAGGGACGCTGTTTGGTTCTATGTGGTTGGTCTGTTTCCCGGACAAGAAAAATTGCAA 2040

Qy       2041 TCAAATGTCAGCAGCTTTTATTACCTTAATCTTTCAGGGCCTAAATTTAGGAGAGTGTCC 2100
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2041 TCAAATGTCAGCAGCTTTTATTACCTTAATCTTTCAGGGCCTAAATTTAGGAGAGTGTCC 2100

Qy       2101 TGAGAGCAGTTCATACAAAGGGCTTTCTCTAAGACGCGCTACAGCCCTTCCTAGCAGAGT 2160
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2101 TGAGAGCAGTTCATACAAAGGGCTTTCTCTAAGACGCGCTACAGCCCTTCCTAGCAGAGT 2160

Qy       2161 TTATCCATTCGTCCCCAAGAGCAGCTAGAAGAGATTTGAGGTCATGACCTCCCACTGCCG 2220
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2161 TTATCCATTCGTCCCCAAGAGCAGCTAGAAGAGATTTGAGGTCATGACCTCCCACTGCCG 2220

Qy       2221 CTCAGGGGCTGACCCTATTTAGGAAACCAAAGAGGGTGGGTTGAACCTACTCTCACGGAC 2280
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2221 CTCAGGGGCTGACCCTATTTAGGAAACCAAAGAGGGTGGGTTGAACCTACTCTCACGGAC 2280

Qy       2281 TTGGATCCAGTGCGCACACTTGCCTGCGGAAAAGGGCTCTCCCCAGCCACCCGGAGATGG 2340
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2281 TTGGATCCAGTGCGCACACTTGCCTGCGGAAAAGGGCTCTCCCCAGCCACCCGGAGATGG 2340

Qy       2341 GGGTAAGAGGAAGAGCAGAGGCTTGGGGTAGGGCCACCTGGTGTTTAAACAGGCACTTTC 2400
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2341 GGGTAAGAGGAAGAGCAGAGGCTTGGGGTAGGGCCACCTGGTGTTTAAACAGGCACTTTC 2400

Qy       2401 TCCTTCTCTGGGGCTTATTTTTGTTCAGAACTAGACCAGAGTGTTTGAACCTCCTTTGCA 2460
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2401 TCCTTCTCTGGGGCTTATTTTTGTTCAGAACTAGACCAGAGTGTTTGAACCTCCTTTGCA 2460

Qy       2461 GGAGGGCTGGGAATCCTCTTTAGAGCACTTAATCCTATTTATCCCCTGGAATGTGCGTGC 2520
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Qy       2521 TGGCCAGTAGGAGGGCTGGCTTTGGCAGCTCCCTGACCCCCGCGCTGCCCGCCCCTCCGG 2580
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2521 TGGCCAGTAGGAGGGCTGGCTTTGGCAGCTCCCTGACCCCCGCGCTGCCCGCCCCTCCGG 2580

Qy       2581 GGTAATGTGGCATTACTGGCCCACAGAGGTTTTGAGCCAATCAGCTCTGAGACTGGGTTA 2640
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Qy       2641 GAATGTAACAGCTTTAACTTGGGATTTAAGAAGCTTTTAAAAGGTAATAATCCTCTGAAA 2700
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2641 GAATGTAACAGCTTTAACTTGGGATTTAAGAAGCTTTTAAAAGGTAATAATCCTCTGAAA 2700

Qy       2701 GAAAAATGACGTAACCACAGCGTGTACTATGAAAGCTGTTATTTTAATAAAGAACGCTGG 2760
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2701 GAAAAATGACGTAACCACAGCGTGTACTATGAAAGCTGTTATTTTAATAAAGAACGCTGG 2760

Qy       2761 GCCATGAACTCATACCTGCCAATGAGTCAAACATAGTATCTTTATGTAGATACTTAGATT 2820
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2761 GCCATGAACTCATACCTGCCAATGAGTCAAACATAGTATCTTTATGTAGATACTTAGATT 2820

Qy       2821 ACTAAATATATATTTCATCTACTTCTGAAGTTGATAGTCTTCCCCCCCCCCCCACTTTTT 2880
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2821 ACTAAATATATATTTCATCTACTTCTGAAGTTGATAGTCTTCCCCCCCCCCCCACTTTTT 2880

Qy       2881 TCTTTTTTGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2881 TCTTTTTTGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940

Qy       2941 AGCGAAACCCGATCTCTACTAAAAAATATAAAAATTGGCCGGGCATGGTGGCGCATGCCT 3000
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2941 AGCGAAACCCGATCTCTACTAAAAAATATAAAAATTGGCCGGGCATGGTGGCGCATGCCT 3000

Qy       3001 GTGGTCCCAGCTACTCGGGAGGTTGAGGCAGGAGAGTCGCTTGAATGCAGGAGGTGGAGG 3060
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       3001 GTGGTCCCAGCTACTCGGGAGGTTGAGGCAGGAGAGTCGCTTGAATGCAGGAGGTGGAGG 3060

Qy       3061 TTGCAATGAGCAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTC 3120
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       3061 TTGCAATGAGCAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTC 3120

Qy       3121 TC 3122
              ||
Db       3121 TC 3122
```

RESULT 2
ADR07462
ID ADR07462 standard; cDNA; 2327 BP.
XX
AC ADR07462;
XX
DT 04-NOV-2004 (first entry)
XX
DE Full length human cDNA useful for treating neurological disease Seq 968.
XX
KW gene; ss; human; oligo-capping method; diagnostic marker; gene therapy;
KW osteoporosis; neurological disease; Alzheimer's disease;
KW Parkinson's disease; dementia; short memory; cancer;
KW sense or motor function; emotional reaction; fear response; panic;
KW osteopathic; neuroprotective; nootropic; antiparkinsonian; cytostatic;
KW tranquiliser.
XX
OS Homo sapiens.
XX
PN EP1447413-A2.
XX
PD 18-AUG-2004.
XX
PF 12-FEB-2004; 2004EP-00003145.
XX
PR 14-FEB-2003; 2003JP-00102207.
PR 09-MAY-2003; 2003JP-00131452.
XX
PA (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI Isogai T, Yamamoto J, Nishikawa T, Isono Y, Sugiyama T, Otsuki T;
PI Wakamatsu A, Ishii S, Nagai K, Irie R;
XX
DR WPI; 2004-583265/57.
DR P-PSDB; ADR09418.
XX
PT New 1995 cDNA, useful for treating osteoporosis, neurological diseases,
PT Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.
XX
PS Claim 1; SEQ ID NO 968; 2686pp; English.
XX
CC This invention relates to novel, isolated full length human cDNA
CC molecules and the encoded proteins thereof. Specifically, it refers to
CC cDNA clones obtained by an oligo-capping method, where none of these
CC clones are identical to any known human mRNAs. The present invention
CC describes an immunoassay to identify agonists and antagonists, as well as
CC antibodies, antisense molecules and siRNAs that can all be used to bind
CC to and modulate expression of the cDNA molecules. As such, these
CC molecules are useful for diagnostic markers or therapeutic targets for

CC the various diseases or morbid states. In particular, they are useful in
CC gene therapy for treating osteoporosis, neurological disease, Alzheimer's
CC disease, Parkinson's disease, dementia, short memory and various cancers,
CC as well as for maintaining equilibrium of sense or motor function, and
CC for treating emotional reaction, fear response and panic. Accordingly,
CC they exhibit osteopathic, neuroprotective, nootropic, antiparkinsonian,
CC cytostatic and tranquiliser activities. This polynucleotide is a full
CC length human cDNA sequence of the invention. NOTE: This sequence is not
CC given in the sequence listing of the specification but can be obtained on
CC CD-ROM from the European Patent Office, Vienna Sub-office.
XX
SQ Sequence 2327 BP; 424 A; 667 C; 788 G; 448 T; 0 U; 0 Other;

Query Match 62.5%; Score 1952; DB 13; Length 2327;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 2322; Conservative 0; Mismatches 5; Indels 1; Gaps 1;

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Qy        444 ACCCGGCCGCCCTTGGCAGCGCCTAAGGCGGAGCGCGCGGCTCTGCAGCCTGCTTGCCCC 503
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ACCCGGCCGCCCTTGGCAGCGCCTAAGGCGGAGCGCGCGGCTCTGCAGCCTGCTTGCCCC 60

Qy        504 GGAGTTGGCACCCACGGAGGATGGGGACCGCACCCTCAGCTTCGCAGGGAGCCACCGTGG 563
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 GGAGTTGGCACCCACGGAGGATGGGGACCGCACCCTCAGCTTCGCAGGGAGCCACCGTGG 120

Qy        564 AGGCCAGGGCGGTGCAGAGACACGACGTGTGACTCGGAGTGCGCCTGGGGAGGATGGACG 623
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 AGGCCAGGGCGGTGCAGAGACACGACGTGTGACTCGGAGTGCGCCTGGGGAGGATGGACG 180

Qy        624 AGGGAGCGGGGGACCGCTAACGGGGCTCCCTCTGCGCGCCCCGTCCGCAGAGGCGCACGT 683
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 AGGGAGCGGGGGACCGCTAACGGGGCTCCCTCTGCGCGCCCCGTCCGCAGAGGCGCACGT 240

Qy        684 CGAGGGTCCCGGGCGGGCTCCGTGGACGTTGGCGGTAGCGCCGAGCGAGTCACGGACCAT 743
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 CGAGGGTCCCGGGCGGGCTCCGTGGACGTTGGCGGTAGCGCCGAGCGAGTCACGGACCAT 300

Qy        744 GAAGAGCGTTCGTGCCGCGCGGCCCAAGGCCGGGATGGGGGTTAGCCACATCCTGCCGCG 803
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 GAAGAGCGTTCGTGCCGCGCGGCCCAAGGCCGGGATGGGGGTTAGCCACATCCTGCCGCG 360

Qy        804 CTGAGGGGGAGGCTAACGGGCGCGGGCGGCCGGGCCCAGCCGGAGCCCACCGCGATGGCG 863
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 CTGAGGGGGAGGCTAACGGGCGCGGGCGGCCGGGCCCAGCCGGAGCCCACCGCGATGGCG 420

Qy        864 AGGGAGGAGTGCAAGGCGCTGCTGGACGGGCTCAACAAGACGACTGCGTGCTACCACCAC 923
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 AGGGAGGAGTGCAAGGCGCTGCTGGACGGGCTCAACAAGACGACTGCGTGCTACCACCAC 480

Qy        924 CTGGTGCTGACCGTCGGTGGCTCGGCGGACTCGCAGAACCTGCGGCAGGAGCTGCAAAAG 983
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 CTGGTGCTGACCGTCGGTGGCTCGGCGGACTCGCAGAACCTGCGGCAGGAGCTGCAAAAG 540

Qy        984 ACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTCCACCTGCGCCCGGCTGACTGCTGTGCTG 1043
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 ACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTCCACCTGCGCCCGGCTGACTGCTGTGCTG 600

Qy       1044 CGCGACCGGGGGCCTGGCCGCCGACGAGCGCGCCGAGTTCGAGCGGCTCTGGGTGGCCTTC 1103
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        601 CGCGACCGGGGCCTGGCCGCCGACGAGCGCGCCGAGTTCGAGCGGCTCTGGGTGGCCTTC 660

Qy       1104 TCGGGCTGCCTGGACCTGCTGGAAGCGGACATGCGACGCTCGCTGGAGCTGGGCGCCGCG 1163
              ||||||||||||||||||||||||||||||||||||||||||| |||||||||||||||||
Db        661 TCGGGCTGCCTGGACCTGCTGGAAGCGGACATGCGACGCGCGCTGGAGCTGGGCGCCGCG 720

Qy       1164 TTCCCGCTGCACGCGCCGCGGCGACCGCTGGTGCGCACAGGTGTGGCTGGCGCCTCCTCC 1223
              ||||||||||||||||||||||| |||||||||||||||||||||||||||||||||||||
Db        721 TTCCCGCTGCACGCGCCGCGGCGGCCGCTGGTGCGCACAGGTGTGGCTGGCGCCTCCTCC 780

Qy       1224 GGCGTGGCGGCGCGCGCGCTGAGCACCCGCAGCCTGCGGCTCGAGGCGGAGGGCGACTTC 1283
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        781 GGCGTGGCGGCGCGCGCGCTGAGCACCCGCAGCCTGCGGCTCGAGGCGGAGGGCGACTTC 840

Qy       1284 GACGTCGCGGACCTGCGGGAGCTGGAGCGCGAGGTCCTTCAGGTGGGCGAGATGATCGAC 1343
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         841 GACGTCGCGGACCTGCGGGAGCTGGAGCGCGAGGTCCTTCAGGTGGGCGAGATGATCGAC 900

Qy       1344 AACATGGAGATGAAGGTCAACGTGCCCCGCTGGACCGTGCAAGCCCGGCAGGCGGCGGGC 1403
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         901 AACATGGAGATGAAGGTCAACGTGCCCCGCTGGACCGTGCAAGCCCGGCAGGCGGCGGGC 960

Qy       1404 GCCGAGCTCCTGTCCACGGTCAGCGCCGGCCCCTCCTCGGTCGTGTCCTTGCAGGAGCGC 1463
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Db         961 GCCGAGCTCCTGTCCACGGTCAGCGCCGGCCCCTCCTCGGTCGTGTCCTTGCAGGAGCGC 1020

Qy       1464 GGGGGGGGTTGCGACCCCAGGAAGGCCCTGGCCGCCATCCTTTTCGGCGCCGTGCTGCTG 1523
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Db        1021 GGGGGGGGTTGCGACCCCAGGAAGGCCCTGGCCGCCATCCTTTTCGGCGCCGTGCTGCTG 1080

Qy       1524 GCGGCTGTGGCCCTAGCCGTGTGCGTGGCGAAGCTGAGCTGACAGACACCCGACGGCCGC 1583
              |||||||||||||||||||||||||||||||||||||||||| ||||||||||||||||||
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Qy       1584 CTGCTGCTGCCGCTCCCTCCCCTGAGAAAAGACTCGGGATGGGTGTGGGGTCTGGCCTGT 1643
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy       1644 GCAAGGGGAGTGGTCCTAAAACCCCGTGTGTGCATGGGTACACGCGCGTTTCCAGTGCAC 1703
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Qy       1704 ATCTGCCTGGGCAGGACACGGTTTTCCTCTTGCTGGCCCGGGAGAAGTTAACTTTGCGCC 1763
              |||||||||||||||||||| |||||||||||||||||||| ||||||||||||||||||
Db        1261 ATCTGCCTGGGCAGGACACGG-TTTCCTCTTGCTGGCCCGGGAGGAGTTAACTTTGCGCC 1319

Qy       1764 GGCCGTCAGGGCATTACCGCTAACGTCTGCAGGAGCTTTATTCCCTATTAATAGAAAACC 1823
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1320 GGCCGTCAGGGCATTACCGCTAACGTCTGCAGGAGCTTTATTCCCTATTAATAGAAAACC 1379

Qy       1824 GTCACAGTGACCCTAGATCCCTCCGAGTTAATGAGTTAACACATGTGCTGTTGGGGCGTC 1883
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1380 GTCACAGTGACCCTAGATCCCTCCGAGTTAATGAGTTAACACATGTGCTGTTGGGGCGTC 1439

Qy       1884 TTTACAGGGAGTCCGAGTTCGGTGCCCACCCCTGCCAGCGTCGCCCCCTTTCTGCGTGGG 1943
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1440 TTTACAGGGAGTCCGAGTTCGGTGCCCACCCCTGCCAGCGTCGCCCCCTTTCTGCGTGGG 1499

Qy       1944 ACAGTTTGAAAAGGTGGGTGGGGTGGAGTGAAGTTTGGAGAGGGACGCTGTTTGGTTCTA 2003
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1500 ACAGTTTGAAAAGGTGGGTGGGGTGGAGTGAAGTTTGGAGAGGGACGCTGTTTGGTTCTA 1559

Qy       2004 TGTGGTTGGTCTGTTTCCCGGACAAGAAAAATTGCAATCAAATGTCAGCAGCTTTTATTA 2063
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1560 TGTGGTTGGTCTGTTTCCCGGACAAGAAAAATTGCAATCAAATGTCAGCAGCTTTTATTA 1619

Qy       2064 CCTTAATCTTTCAGGGCCTAAATTTAGGAGAGTGTCCTGAGAGCAGTTCATACAAAGGGC 2123
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Db        1620 CCTTAATCTTTCAGGGCCTAAATTTAGGAGAGTGTCCCGAGAGCAGTTCATACAAAGGGC 1679

Qy       2124 TTTCTCTAAGACGCGCTACAGCCCTTCCTAGCAGAGTTTATCCATTCGTCCCCAAGAGCA 2183
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1680 TTTCTCTAAGACGCGCTACAGCCCTTCCTAGCAGAGTTTATCCATTCGTCCCCAAGAGCA 1739

Qy       2184 GCTAGAAGAGATTTGAGGTCATGACCTCCCACTGCCGCTCAGGGGCTGACCCTATTTAGG 2243
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1740 GCTAGAAGAGATTTGAGGTCATGACCTCCCACTGCCGCTCAGGGGCTGACCCTATTTAGG 1799

Qy       2244 AAACCAAAGAGGGTGGGTTGAACCTACTCTCACGGACTTGGATCCAGTGCGCACACTTGC 2303
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1800 AAACCAAAGAGGGTGGGTTGAACCTACTCTCACGGACTTGGATCCAGTGCGCACACTTGC 1859

Qy       2304 CTGCGGAAAAGGGCTCTCCCCAGCCACCCGGAGATGGGGGTAAGAGGAAGAGCAGAGGCT 2363
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1860 CTGCGGAAAAGGGCTCTCCCCAGCCACCCGGAGATGGGGGTAAGAGGAAGAGCAGAGGCT 1919

Qy       2364 TGGGGTAGGGCCACCTGGTGTTTAAACAGGCACTTTCTCCTTCTCTGGGGCTTATTTTTG 2423
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                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1920 TGGGGTAGGGCCACCTGGTGTTTAAACAGGCACTTTCTCCTTCTCTGGGGCTTATTTTTG 1979

Qy       2424 TTCAGAACTAGACCAGAGTGTTTGAACCTCCTTTGCAGGAGGGCTGGGAATCCTCTTTAG 2483
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1980 TTCAGAACTAGACCAGAGTGTTTGAACCTCCTTTGCAGGAGGGCTGGGAATCCTCTTTAG 2039

Qy       2484 AGCACTTAATCCTATTTATCCCCTGGAATGTGCGTGCTGGCCAGTAGGAGGGCTGGCTTT 2543
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Qy       2544 GGCAGCTCCCTGACCCCCGCGCTGCCCGCCCCTCCGGGGTAATGTGGCATTACTGGCCCA 2603
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RESULT 3
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ID   AAK83424 standard; DNA; 1009 BP.
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AC   AAK83424;
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DT   07-NOV-2001  (first entry)
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DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:38236.
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KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
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XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-483426/52.
XX
PT   Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS   Disclosure; SEQ ID NO 38236; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting the
CC   nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 1009 BP; 260 A; 269 C; 239 G; 241 T; 0 U; 0 Other;

  Query Match           32.3%;  Score 1009;  DB 4;  Length 1009;
  Best Local Similarity 100.0%;  Pred. No. 0;

  Matches 1009;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1766 CCGTCAGGGCATTACCGCTAACGTCTGCAGGAGCTTTATTCCCTATTAATAGAAAACCGT 1825
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Db       1009 CCGTCAGGGCATTACCGCTAACGTCTGCAGGAGCTTTATTCCCTATTAATAGAAAACCGT 950

Qy       1826 CACAGTGACCCTAGATCCCTCCGAGTTAATGAGTTAACACATGTGCTGTTGGGGCGTCTT 1885
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        949 CACAGTGACCCTAGATCCCTCCGAGTTAATGAGTTAACACATGTGCTGTTGGGGCGTCTT 890

Qy       1886 TACAGGGAGTCCGAGTTCGGTGCCCACCCCTGCCAGCGTCGCCCCCTTTCTGCGTGGGAC 1945
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Db        889 TACAGGGAGTCCGAGTTCGGTGCCCACCCCTGCCAGCGTCGCCCCCTTTCTGCGTGGGAC 830

Qy       1946 AGTTTGAAAAGGTGGGTGGGGTGGAGTGAAGTTTGGAGAGGGACGCTGTTTGGTTCTATG 2005
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Db        829 AGTTTGAAAAGGTGGGTGGGGTGGAGTGAAGTTTGGAGAGGGACGCTGTTTGGTTCTATG 770

Qy       2006 TGGTTGGTCTGTTTCCCGGACAAGAAAAATTGCAATCAAATGTCAGCAGCTTTTATTACC 2065
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        769 TGGTTGGTCTGTTTCCCGGACAAGAAAAATTGCAATCAAATGTCAGCAGCTTTTATTACC 710

Qy       2066 TTAATCTTTCAGGGCCTAAATTTAGGAGAGTGTCCTGAGAGCAGTTCATACAAAGGGCTT 2125
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Db        709 TTAATCTTTCAGGGCCTAAATTTAGGAGAGTGTCCTGAGAGCAGTTCATACAAAGGGCTT 650

Qy       2126 TCTCTAAGACGCGCTACAGCCCTTCCTAGCAGAGTTTATCCATTCGTCCCCAAGAGCAGC 2185
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Qy       2186 TAGAAGAGATTTGAGGTCATGACCTCCCACTGCCGCTCAGGGGCTGACCCTATTTAGGAA 2245
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DT   07-NOV-2001  (first entry)
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KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
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PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 38235; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 1009 BP; 260 A; 269 C; 239 G; 241 T; 0 U; 0 Other;

Query Match 32.3%; Score 1009; DB 4; Length 1009;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1009; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db        769 TGGTTGGTCTGTTTCCCGGACAAGAAAAATTGCAATCAAATGTCAGCAGCTTTTATTACC 710

Qy       2066 TTAATCTTTCAGGGCCTAAATTTAGGAGAGTGTCCTGAGAGCAGTTCATACAAAGGGCTT 2125
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Qy       2186 TAGAAGAGATTTGAGGTCATGACCTCCCACTGCCGCTCAGGGGCTGACCCTATTTAGGAA 2245
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Qy       2246 ACCAAAGAGGGTGGGTTGAACCTACTCTCACGGACTTGGATCCAGTGCGCACACTTGCCT 2305
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Qy       2306 GCGGAAAAGGGCTCTCCCCAGCCACCCGGAGATGGGGGTAAGAGGAAGAGCAGAGGCTTG 2365
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Qy       2426 CAGAACTAGACCAGAGTGTTTGAACCTCCTTTGCAGGAGGGCTGGGAATCCTCTTTAGAG 2485
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Qy       2486 CACTTAATCCTATTTATCCCCTGGAATGTGCGTGCTGGCCAGTAGGAGGGCTGGCTTTGG 2545
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Db        289 CACTTAATCCTATTTATCCCCTGGAATGTGCGTGCTGGCCAGTAGGAGGGCTGGCTTTGG 230

Qy       2546 CAGCTCCCTGACCCCCGCGCTGCCCGCCCCTCCGGGGTAATGTGGCATTACTGGCCCACA 2605
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RESULT 5
AAK83422/c
ID AAK83422 standard; DNA; 1009 BP.
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AC AAK83422;
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DT 07-NOV-2001 (first entry)
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DE Human immune/haematopoietic antigen genomic sequence SEQ ID NO:38234.
XX
KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS Homo sapiens.
XX
PN WO200157182-A2.
XX
PD 09-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001354.
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PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
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PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 38234; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
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CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)

```
CC   polynucleotides may be used to produce the secreted (I), by inserting the
CC   nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 1009 BP; 259 A; 269 C; 239 G; 242 T; 0 U; 0 Other;

  Query Match             29.1%;  Score 907;  DB 4;  Length 1009;
  Best Local Similarity   99.8%;  Pred. No. 0;
  Matches 1007;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1766 CCGTCAGGGCATTACCGCTAACGTCTGCAGGAGCTTTATTCCCTATTAATAGAAAACCGT 1825
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Db        889 TACAGGGAGTCCGAGTTCGGTGCCCACCCCTGCCAGCGTCGCCCCCTTTCTGCGTGGGAC 830

Qy       1946 AGTTTGAAAAGGTGGGTGGGGTGGAGTGAAGTTTGGAGAGGGACGCTGTTTGGTTCTATG 2005
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Qy       2366 GGGTAGGGCCACCTGGTGTTTAAACAGGCACTTTCTCCTTCTCTGGGGCTTATTTTTGTT 2425
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Db        409 GGGTAGGGCCACCTGGTGTTTAAACAGGCACTTTCTCCTTCTCTGGGGCTTATTTTTGTT 350

Qy       2426 CAGAACTAGACCAGAGTGTTTGAACCTCCTTTGCAGGAGGGCTGGGAATCCTCTTTAGAG 2485
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Db        349 CAGAACTAGACCAGAGTGTTTGAACCTCCTTTGCAGGAGGGCTGGGAATCCTCTTTAGAG 290

Qy       2486 CACTTAATCCTATTTATCCCCTGGAATGTGCGTGCTGGCCAGTAGGAGGGCTGGCTTTGG 2545
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Db        289 CACTTAATCCTATTTATCCCCTGGAATGTGCGTGCTGGCCAGTAGGAGGGCTGGCTTTGG 230

Qy       2546 CAGCTCCCTGACCCCCGCGCTGCCCGCCCCTCCGGGGTAATGTGGCATTACTGGCCCACA 2605
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RESULT 6
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ID   AAS93728 standard; cDNA; 850 BP.
XX
AC   AAS93728;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #29532.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US008631.
XX
PR   31-MAR-2000; 2000US-00540217.
PR   23-AUG-2000; 2000US-00649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
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DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG29541.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity.
XX
PS   Claim 1; SEQ ID NO 29532; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC   sequences. (I) is useful as hybridisation probes, polymerase chain
CC   reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC   and in recombinant production of (II). The polynucleotides are also used
CC   in diagnostics as expressed sequence tags for identifying expressed
CC   genes. (I) is useful in gene therapy techniques to restore normal
CC   activity of (II) or to treat disease states involving (II). (II) is
CC   useful for generating antibodies against it, detecting or quantitating a
CC   polypeptide in tissue, as molecular weight markers and as a food
CC   supplement. (II) and its binding partners are useful in medical imaging
CC   of sites expressing (II). (I) and (II) are useful for treating disorders
CC   involving aberrant protein expression or biological activity. The
CC   polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic
CC   coding sequences of the invention. Note: The sequence data for this
CC   patent did not appear in the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 850 BP; 116 A; 278 C; 340 G; 116 T; 0 U; 0 Other;
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  Query Match            24.0%;  Score 748;  DB 5;  Length 850;
  Best Local Similarity   99.8%;  Pred. No. 0;
  Matches  848;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        716 CGGTAGCGCCGAGCGAGTCACGGACCATGAAGAGCGTTCGTGCCGCGCGGCCCAAGGCCG 775
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 CGGTAGCGCCGAGCGAGTCACGGACCATGAAGAGCGTTCGTGCCGCGCGGCCCAAGGCCG 60

Qy        776 GGATGGGGGTTAGCCACATCCTGCCGCGCTGAGGGGGAGGCTAACGGGCGCGGGCGGCCG 835
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 GGATGGGGGTTAGCCACATCCTGCCGCGCTGAGGGGGAGGCTAACGGGCGCGGGCGGCCG 120

Qy        836 GGCCCAGCCGGAGCCCACCGCGATGGCGAGGGAGGAGTGCAAGGCGCTGCTGGACGGGCT 895
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 GGCCCAGCCGGAGCCCACCGCGATGGCGAGGGAGGAGTGCAAGGCGCTGCTGGACGGGCT 180

Qy        896 CAACAAGACGACTGCGTGCTACCACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTC 955
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 CAACAAGACGACTGCGTGCTACCACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTC 240

Qy        956 GCAGAACCTGCGGCAGGAGCTGCAAAAGACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTC 1015
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 GCAGAACCTGCGGCAGGAGCTGCAAAAGACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTC 300

Qy       1016 CACCTGCGCCCGGCTGACTGCTGTGCTGCGCGACCGGGGCCTGGCCGCCGACGAGCGCGC 1075
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 CACCTGCGCCCGGCTGACTGCTGTGCTGCGCGACCGGGGCCTGGCCGCCGACGAGCGCGC 360

Qy       1076 CGAGTTCGAGCGGCTCTGGGTGGCCTTCTCGGGCTGCCTGGACCTGCTGGAAGCGGACAT 1135
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 CGAGTTCGAGCGGCTCTGGGTGGCCTTCTCGGGCTGCCTGGACCTGCTGGAAGCGGACAT 420

Qy       1136 GCGACGCTCGCTGGAGCTGGGCGCCGCGTTCCCGCTGCACGCGCCGCGGCGACCGCTGGT 1195
              ||||||| |||||||||||||||||||||||||||||||||||||||| ||||||||
Db        421 GCGACGCGCGCTGGAGCTGGGCGCCGCGTTCCCGCTGCACGCGCCGCGGCGGCCGCTGGT 480

Qy       1196 GCGCACAGGTGTGGCTGGCGCCTCCTCCGGCGTGGCGGCGCGCGCGCTGAGCACCCGCAG 1255
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 GCGCACAGGTGTGGCTGGCGCCTCCTCCGGCGTGGCGGCGCGCGCGCTGAGCACCCGCAG 540

Qy       1256 CCTGCGGCTCGAGGCGGAGGGCGACTTCGACGTCGCGGACCTGCGGGAGCTGGAGCGCGA 1315
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 CCTGCGGCTCGAGGCGGAGGGCGACTTCGACGTCGCGGACCTGCGGGAGCTGGAGCGCGA 600

Qy       1316 GGTCCTTCAGGTGGGCGAGATGATCGACAACATGGAGATGAAGGTCAACGTGCCCCGCTG 1375
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        601 GGTCCTTCAGGTGGGCGAGATGATCGACAACATGGAGATGAAGGTCAACGTGCCCCGCTG 660

Qy       1376 GACCGTGCAAGCCCGGCAGGCGGCGGGCGCCGAGCTCCTGTCCACGGTCAGCGCCGGCCC 1435
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        661 GACCGTGCAAGCCCGGCAGGCGGCGGGCGCCGAGCTCCTGTCCACGGTCAGCGCCGGCCC 720

Qy       1436 CTCCTCGGTCGTGTCCTTGCAGGAGCGCGGGGGGGGGTTGCGACCCCAGGAAGGCCCTGGC 1495
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        721 CTCCTCGGTCGTGTCCTTGCAGGAGCGCGGGGGGGGGTTGCGACCCCAGGAAGGCCCTGGC 780

Qy       1496 CGCCATCCTTTTCGGCGCCGTGCTGCTGGCGGCTGTGGCCCTAGCCGTGTGCGTGGCGAA 1555
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        781 CGCCATCCTTTTCGGCGCCGTGCTGCTGGCGGCTGTGGCCCTAGCCGTGTGCGTGGCGAA 840

Qy       1556 GCTGAGCTGA 1565
              ||||||||||
Db        841 GCTGAGCTGA 850


RESULT 7
ACH87504/c
ID   ACH87504 standard; DNA; 708 BP.
XX
AC   ACH87504;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human genome derived single exon probe #20699.
XX
KW   Human; probe; ss; gene expression; single exon probe; microarray;
KW   alternative splicing event; genomic alteration.
XX
OS   Homo sapiens.
XX
PN   US2003194704-A1.
XX
PD   16-OCT-2003.
XX
PF   03-APR-2002; 2002US-00029386.
XX
PR   03-APR-2002; 2002US-00029386.
XX
PA   (PENN/) PENN S G.
PA   (RANK/) RANK D R.
PA   (HANZ/) HANZEL D K.
XX
PI   Penn SG,  Rank DR,  Hanzel DK;
XX
DR   WPI; 2004-119264/12.
XX
PT   New human genome-derived single exon nucleic acid probes useful for human
PT   gene expression analysis, for identifying or characterizing alternative
PT   splicing events, for assessing genomic alterations or as tools for
PT   surveying tissues.
XX
PS   Claim 1; SEQ ID NO 20699; 80pp; English.
XX
CC   The invention relates to a nucleic acid probe for measuring human gene
CC   expression, comprising any of the 27,400 fully defined nucleotide
CC   sequences in the specification, or their complements or fragments, and
CC   encoding at least 8 amino acids of any of the 6888 amino acid sequences
CC   fully defined in the specification. The probe is a single exon probe that
CC   hybridises under high stringency conditions to a nucleic acid molecule
CC   expressed in human cells or tissues. Also included are a spatially-
CC   addressable set of single exon nucleic acid probes for measuring human
CC   gene expression (comprising a plurality of single exon nucleic acid
CC   probes cited above, where each of the plurality of probes is separately
CC   and addressably isolatable or amplifiable from the plurality), a single
CC   exon microarray for measuring human gene expression, a method of
CC   measuring human gene expression, a vector comprising the single exon
CC   probe cited above, an ORF-encoded peptide comprising at least 8
CC   contiguous amino acids of any of the above- mentioned amino acid
CC   sequences (optionally with conservative amino acid substitutions), an
CC   isolated antibody that binds specifically to a peptide cited above,
CC   methods of selling and/or licensing single exon probes or microarrays to
CC   a customer desiring to measure gene expression, a method of providing
CC   human gene expression data by subscription, and a computer-readable
CC   storage medium which contains a database having a plurality of records
CC   (each record including data on the expression of a single exon probe
CC   cited above. The probe, methods and apparatus are useful in gene
CC   expression analysis. The probes may be used as tools for surveying
CC   tissues to detect the presence of expressed messages that contain their
CC   specific exon, or in constructing genome-derived single exon microarrays.
CC   In addition, the probes are used in identifying and characterising
CC   alternative splicing events, in detecting and characterising gross
CC   alterations in the genomic locus that includes their exon, in assessing
CC   smaller genomic alterations, in priming the synthesis of nucleic acids,
CC   or in expressing the ORF-encoded peptide. The present sequence is a human
CC   single exon probe of the invention. Note: The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from USPTO at
CC   seqdata.uspto.gov/sequence.html?DocID=20030194704
XX
SQ   Sequence 708 BP; 104 A; 279 C; 231 G; 94 T; 0 U; 0 Other;

  Query Match            21.0%;  Score 657;  DB 12;  Length 708;
  Best Local Similarity   99.9%;  Pred. No. 2.9e-296;
  Matches  707;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        858 ATGGCGAGGGAGGAGTGCAAGGCGCTGCTGGACGGGCTCAACAAGACGACTGCGTGCTAC 917
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                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        708 ATGGCGAGGGAGGAGTGCAAGGCGCTGCTGGACGGGCTCAACAAGACGACTGCGTGCTAC 649

Qy        918 CACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTCGCAGAACCTGCGGCAGGAGCTG 977
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        648 CACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTCGCAGAACCTGCGGCAGGAGCTG 589

Qy        978 CAAAAGACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTCCACCTGCGCCCGGCTGACTGCT 1037
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        588 CAAAAGACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTCCACCTGCGCCCGGCTGACTGCT 529

Qy       1038 GTGCTGCGCGACCGGGGCCTGGCCGCCGACGAGCGCGCCGAGTTCGAGCGGCTCTGGGTG 1097
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        528 GTGCTGCGCGACCGGGGCCTGGCCGCCGACGAGCGCGCCGAGTTCGAGCGGCTCTGGGTG 469

Qy       1098 GCCTTCTCGGGCTGCCTGGACCTGCTGGAAGCGGACATGCGACGCTCGCTGGAGCTGGGC 1157
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        468 GCCTTCTCGGGCTGCCTGGACCTGCTGGAAGCGGACATGCGACGCTCGCTGGAGCTGGGC 409

Qy       1158 GCCGCGTTCCCGCTGCACGCGCCGCGGCGACCGCTGGTGCGCACAGGTGTGGCTGGCGCC 1217
                |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||||
Db        408 GCCGCGTTCCCGCTGCACGCGCCGCGGCGGCCGCTGGTGCGCACAGGTGTGGCTGGCGCC 349

Qy       1218 TCCTCCGGCGTGGCGGCGCGCGCGCTGAGCACCCGCAGCCTGCGGCTCGAGGCGGAGGGC 1277
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        348 TCCTCCGGCGTGGCGGCGCGCGCGCTGAGCACCCGCAGCCTGCGGCTCGAGGCGGAGGGC 289

Qy       1278 GACTTCGACGTCGCGGACCTGCGGGAGCTGGAGCGCGAGGTCCTTCAGGTGGGCGAGATG 1337
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        288 GACTTCGACGTCGCGGACCTGCGGGAGCTGGAGCGCGAGGTCCTTCAGGTGGGCGAGATG 229

Qy       1338 ATCGACAACATGGAGATGAAGGTCAACGTGCCCCCGCTGGACCGTGCAAGCCCGGCAGGCG 1397
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        228 ATCGACAACATGGAGATGAAGGTCAACGTGCCCCCGCTGGACCGTGCAAGCCCGGCAGGCG 169

Qy       1398 GCGGGCGCCGAGCTCCTGTCCACGGTCAGCGCCGGCCCCTCCTCCGGTCGTGTCCTTGCAG 1457
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        168 GCGGGCGCCGAGCTCCTGTCCACGGTCAGCGCCGGCCCCTCCTCGGTCGTGTCCTTGCAG 109

Qy       1458 GAGCGCGGGGGGGGGTTGCGACCCCAGGAAGGCCCTGGCCGCCATCCTTTTCGGCGCCGTG 1517
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        108 GAGCGCGGGGGGGGGTTGCGACCCCAGGAAGGCCCTGGCCGCCATCCTTTTCGGCGCCGTG 49

Qy       1518 CTGCTGGCGGCTGTGGCCCTAGCCGTGTGCGTGGCGAAGCTGAGCTGA 1565
                ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          48 CTGCTGGCGGCTGTGGCCCTAGCCGTGTGCGTGGCGAAGCTGAGCTGA 1
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RESULT 8
ACH73793/c
ID   ACH73793 standard; DNA; 524 BP.
XX
AC   ACH73793;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human genome derived single exon probe #6988.
XX
KW   Human; probe; ss; gene expression; single exon probe; microarray;
KW   alternative splicing event; genomic alteration.
XX
OS   Homo sapiens.
XX
PN   US2003194704-A1.
XX
PD   16-OCT-2003.
XX
PF   03-APR-2002; 2002US-00029386.
XX
PR   03-APR-2002; 2002US-00029386.
XX
PA   (PENN/) PENN S G.
PA   (RANK/) RANK D R.
PA   (HANZ/) HANZEL D K.
XX
PI   Penn SG,  Rank DR,  Hanzel DK;
XX
DR   WPI; 2004-119264/12.
XX
PT   New human genome-derived single exon nucleic acid probes useful for human
PT   gene expression analysis, for identifying or characterizing alternative
PT   splicing events, for assessing genomic alterations or as tools for
PT   surveying tissues.
XX
PS   Claim 15; SEQ ID NO 6988; 80pp; English.
XX
CC   The invention relates to a nucleic acid probe for measuring human gene
CC   expression, comprising any of the 27,400 fully defined nucleotide
CC   sequences in the specification, or their complements or fragments, and
CC   encoding at least 8 amino acids of any of the 6888 amino acid sequences
CC   fully defined in the specification. The probe is a single exon probe that
CC   hybridises under high stringency conditions to a nucleic acid molecule
CC   expressed in human cells or tissues. Also included are a spatially-
CC   addressable set of single exon nucleic acid probes for measuring human
CC   gene expression (comprising a plurality of single exon nucleic acid
CC   probes cited above, where each of the plurality of probes is separately
CC   and addressably isolatable or amplifiable from the plurality), a single
CC   exon microarray for measuring human gene expression, a method of
CC   measuring human gene expression, a vector comprising the single exon
CC   probe cited above, an ORF-encoded peptide comprising at least 8
CC   contiguous amino acids of any of the above- mentioned amino acid
CC   sequences (optionally with conservative amino acid substitutions), an
CC   isolated antibody that binds specifically to a peptide cited above,
CC   methods of selling and/or licensing single exon probes or microarrays to
CC   a customer desiring to measure gene expression, a method of providing
CC   human gene expression data by subscription, and a computer-readable
CC   storage medium which contains a database having a plurality of records
CC   (each record including data on the expression of a single exon probe
CC   cited above. The probe, methods and apparatus are useful in gene
CC   expression analysis. The probes may be used as tools for surveying
CC   tissues to detect the presence of expressed messages that contain their
CC   specific exon, or in constructing genome-derived single exon microarrays.
CC   In addition, the probes are used in identifying and characterising
CC   alternative splicing events, in detecting and characterising gross
CC   alterations in the genomic locus that includes their exon, in assessing
CC   smaller genomic alterations, in priming the synthesis of nucleic acids,
CC   or in expressing the ORF-encoded peptide. The present sequence is a human
CC   single exon probe of the invention. Note: The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from USPTO at
CC   seqdata.uspto.gov/sequence.html?DocID=20030194704
XX
SQ   Sequence 524 BP; 61 A; 212 C; 162 G; 89 T; 0 U; 0 Other;

  Query Match           16.8%;  Score 524;  DB 12;  Length 524;
  Best Local Similarity  100.0%;  Pred. No. 4.3e-234;
  Matches  524;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        484 CTCTGCAGCCTGCTTGCCCCGGAGTTGGCACCCACGGAGGATGGGGACCGCACCCTCAGC 543
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        524 CTCTGCAGCCTGCTTGCCCCGGAGTTGGCACCCACGGAGGATGGGGACCGCACCCTCAGC 465

Qy        544 TTCGCAGGGAGCCACCGTGGAGGCCAGGGCGGTGCAGAGACACGACGTGTGACTCGGAGT 603
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        464 TTCGCAGGGAGCCACCGTGGAGGCCAGGGCGGTGCAGAGACACGACGTGTGACTCGGAGT 405

Qy        604 GCGCCTGGGGAGGATGGACGAGGGAGCGGGGGACCGCTAACGGGGCTCCCTCTGCGCGCC 663
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        404 GCGCCTGGGGAGGATGGACGAGGGAGCGGGGGACCGCTAACGGGGCTCCCTCTGCGCGCC 345

Qy        664 CCGTCCGCAGAGGCGCACGTCGAGGGTCCCGGGCGGGCTCCGTGGACGTTGGCGGTAGCG 723
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        344 CCGTCCGCAGAGGCGCACGTCGAGGGTCCCGGGCGGGCTCCGTGGACGTTGGCGGTAGCG 285

Qy        724 CCGAGCGAGTCACGGACCATGAAGAGCGTTCGTGCCGCGCGGCCCAAGGCCGGGATGGGG 783
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Db        284 CCGAGCGAGTCACGGACCATGAAGAGCGTTCGTGCCGCGCGGCCCAAGGCCGGGATGGGG 225

Qy        784 GTTAGCCACATCCTGCCGCGCTGAGGGGGAGGCTAACGGGCGCGGGCGGCCGGGCCCAGC 843
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        224 GTTAGCCACATCCTGCCGCGCTGAGGGGGAGGCTAACGGGCGCGGGCGGCCGGGCCCAGC 165

Qy        844 CGGAGCCCACCGCGATGGCGAGGGAGGAGTGCAAGGCGCTGCTGGACGGGCTCAACAAGA 903
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        164 CGGAGCCCACCGCGATGGCGAGGGAGGAGTGCAAGGCGCTGCTGGACGGGCTCAACAAGA 105

Qy        904 CGACTGCGTGCTACCACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTCGCAGAACC 963
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        104 CGACTGCGTGCTACCACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTCGCAGAACC 45

Qy        964 TGCGGCAGGAGCTGCAAAAGACGCGCCAGAAGGCGCAGGAGCTG 1007
              |||||||||||||||||||||||||||||||||||||||||||
Db         44 TGCGGCAGGAGCTGCAAAAGACGCGCCAGAAGGCGCAGGAGCTG 1
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RESULT 9
AAK62785/c
ID AAK62785 standard; cDNA; 973 BP.
XX
AC AAK62785;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human immune/haematopoietic antigen encoding cDNA SEQ ID NO:7845.
XX
KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW cytostatic; gene therapy; vaccine; metastasis; ss.
XX
OS Homo sapiens.
XX
PN WO200157182-A2.
XX
PD 09-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001354.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
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PR 30-JUN-2000; 2000US-0215135P.
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PR 11-JUL-2000; 2000US-0217496P.
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PR 30-AUG-2000; 2000US-0228924P.
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PR 06-SEP-2000; 2000US-0230437P.
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PR 08-SEP-2000; 2000US-0231242P.
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PR 08-SEP-2000; 2000US-0232080P.
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PR 12-SEP-2000; 2000US-0231968P.
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PR 14-SEP-2000; 2000US-0232399P.
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PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
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PR 21-SEP-2000; 2000US-0234223P.
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PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
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PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
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PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
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PR 01-NOV-2000; 2000US-0244617P.
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PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
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PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.

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PR   17-NOV-2000; 2000US-0249209P.
PR   17-NOV-2000; 2000US-0249210P.
PR   17-NOV-2000; 2000US-0249211P.
PR   17-NOV-2000; 2000US-0249212P.
PR   17-NOV-2000; 2000US-0249213P.
PR   17-NOV-2000; 2000US-0249214P.
PR   17-NOV-2000; 2000US-0249215P.
PR   17-NOV-2000; 2000US-0249216P.
PR   17-NOV-2000; 2000US-0249217P.
PR   17-NOV-2000; 2000US-0249218P.
PR   17-NOV-2000; 2000US-0249244P.
PR   17-NOV-2000; 2000US-0249245P.
PR   17-NOV-2000; 2000US-0249264P.
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PR   05-JAN-2001; 2001US-0259678P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-483426/52.
DR   P-PSDB; AAM90004.
XX
PT   Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS   Claim 1; SEQ ID NO 7845; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting the
CC   nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
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SQ   Sequence 973 BP; 255 A; 253 C; 226 G; 234 T; 0 U; 5 Other;

  Query Match             16.1%;  Score 504;  DB 4;  Length 973;
  Best Local Similarity   99.8%;  Pred. No. 9.3e-225;
  Matches  624;  Conservative    0;  Mismatches    0;  Indels    1;  Gaps    1;

Qy       1958 TGGGTGGGGTGGAGTGAAGTTTGGAGAGGGACGCTGTTTGGTTCTATGTGGTTGGTCTGT 2017
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        817 TGGGTGGGGTGGAGTGAAGTTTGGAGAGGGACGCTGTTTGGTTCTATGTGGTTGGTCTGT 758

Qy       2018 TTCCCGGACAAGAAAAATTGCAATCAAATGTCAGCAGCTTTTATTACCTTAATCTTTCAG 2077
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Db        757 TTCCCGGACAAGAAAAATTGCAATCAAATGTCAGCAGCTTTTATTACCTTAATCTTTCAG 698

Qy       2078 GGCCTAAATTTAGGAGAGTGTCCTGAGAGCAGTTCATACAAAGGGCTTTCTCTAAGACGC 2137
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        697 GGCCTAAATTTAGGAGAGTGTCCTGAGAGCAGTTCATACAAAGGGCTTTCTCTAAGACGC 638

Qy       2138 GCTACAGCCCTTCCTAGCAGAGTTTATCCATTCGTCCCCAAGAGCAGCTAGAAGAGATTT 2197
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        637 GCTACAGCCCTTCCTAGCAGAGTTTATCCATTCGTCCCCAAGAGCAGCTAGAAGAGATTT 578

Qy       2198 GAGGTCATGACCTCCCACTGCCGCTCAGGGGCTGACCCTATTTAGGAAACCAAAGAGGGT 2257
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        577 GAGGTCATGACCTCCCACTGCCGCTCAGGGGCTGACCCTATTTAGGAAACCAAAGAGGGT 518

Qy       2258 GGGTTGAACCTACTCTCACGGACTTGGATCCAGTGCGCACACTTGCCTGCGGAAAAGGGC 2317
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        517 GGGTTGAACCTACTCTCACGGACTTGGATCCAGTGCGCACACTTGCCTGCGGAAAAGGGC 458

Qy       2318 TCTCCCCAGCCACCCGGAGATGGGGGTAAGAGGAAGAGCAGAGGCTTGGGGTAGGGCCAC 2377
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Qy       2378 CTGGTGTTTAAACA-GGCACTTTCTCCTTCTCTGGGGCTTATTTTTGTTCAGAACTAGAC 2436
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Qy       2497 ATTTATCCCCTGGAATGTGCGTGCTGGCCAGTAGGAGGGCTGGCTTTGGCAGCTCCCTGA 2556
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Db        277 ATTTATCCCCTGGAATGTGCGTGCTGGCCAGTAGGAGGGCTGGCTTTGGCAGCTCCCTGA 218

Qy       2557 CCCCCGCGCTGCCCGCCCCTCCGGG 2581
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Db        217 CCCCCGCGCTGCCCGCCCCTCCGGG 193


RESULT 10
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ID   AAK83430 standard; DNA; 476 BP.
XX
AC   AAK83430;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:38242.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 38242; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the

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CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 476 BP; 59 A; 190 C; 157 G; 70 T; 0 U; 0 Other;

  Query Match             15.1%;  Score 471;  DB 4;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-209;
  Matches  471;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        716 CGGTAGCGCCGAGCGAGTCACGGACCATGAAGAGCGTTCGTGCCGCGCGGCCCAAGGCCG 775
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        476 CGGTAGCGCCGAGCGAGTCACGGACCATGAAGAGCGTTCGTGCCGCGCGGCCCAAGGCCG 417

Qy        776 GGATGGGGGTTAGCCACATCCTGCCGCGCTGAGGGGGAGGCTAACGGGCGCGGGCGGCCG 835
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        416 GGATGGGGGTTAGCCACATCCTGCCGCGCTGAGGGGGAGGCTAACGGGCGCGGGCGGCCG 357

Qy        836 GGCCCAGCCGGAGCCCACCGCGATGGCGAGGGAGGAGTGCAAGGCGCTGCTGGACGGGCT 895
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        356 GGCCCAGCCGGAGCCCACCGCGATGGCGAGGGAGGAGTGCAAGGCGCTGCTGGACGGGCT 297

Qy        896 CAACAAGACGACTGCGTGCTACCACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTC 955
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        296 CAACAAGACGACTGCGTGCTACCACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTC 237

Qy        956 GCAGAACCTGCGGCAGGAGCTGCAAAAGACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTC 1015
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        236 GCAGAACCTGCGGCAGGAGCTGCAAAAGACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTC 177

Qy       1016 CACCTGCGCCCGGCTGACTGCTGTGCTGCGCGACCGGGGCCTGGCCGCCGACGAGCGCGC 1075
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Db        176 CACCTGCGCCCGGCTGACTGCTGTGCTGCGCGACCGGGGCCTGGCCGCCGACGAGCGCGC 117

Qy       1076 CGAGTTCGAGCGGCTCTGGGTGGCCTTCTCGGGCTGCCTGGACCTGCTGGAAGCGGACAT 1135
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Db        116 CGAGTTCGAGCGGCTCTGGGTGGCCTTCTCGGGCTGCCTGGACCTGCTGGAAGCGGACAT 57

Qy       1136 GCGACGCTCGCTGGAGCTGGGCGCCGCGTTCCCGCTGCACGCGCCGCGGCG 1186
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RESULT 11
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ID   AAK83427 standard; DNA; 476 BP.
XX
AC   AAK83427;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:38239.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
XX
PR   31-JAN-2000; 2000US-0179065P.
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PR   17-NOV-2000; 2000US-0249209P.
PR   17-NOV-2000; 2000US-0249210P.
PR   17-NOV-2000; 2000US-0249211P.
PR   17-NOV-2000; 2000US-0249212P.
PR   17-NOV-2000; 2000US-0249213P.
PR   17-NOV-2000; 2000US-0249214P.
PR   17-NOV-2000; 2000US-0249215P.
PR   17-NOV-2000; 2000US-0249216P.
PR   17-NOV-2000; 2000US-0249217P.
PR   17-NOV-2000; 2000US-0249218P.
PR   17-NOV-2000; 2000US-0249244P.
PR   17-NOV-2000; 2000US-0249245P.
PR   17-NOV-2000; 2000US-0249264P.
PR   17-NOV-2000; 2000US-0249265P.
PR   17-NOV-2000; 2000US-0249297P.
PR   17-NOV-2000; 2000US-0249299P.
PR   17-NOV-2000; 2000US-0249300P.
PR   01-DEC-2000; 2000US-0250160P.
PR   01-DEC-2000; 2000US-0250391P.
PR   05-DEC-2000; 2000US-0251030P.
PR   05-DEC-2000; 2000US-0251988P.
PR   05-DEC-2000; 2000US-0256719P.
PR   06-DEC-2000; 2000US-0251479P.
PR   08-DEC-2000; 2000US-0251856P.
PR   08-DEC-2000; 2000US-0251868P.
PR   08-DEC-2000; 2000US-0251869P.
PR   08-DEC-2000; 2000US-0251989P.
PR   08-DEC-2000; 2000US-0251990P.
PR   11-DEC-2000; 2000US-0254097P.
PR   05-JAN-2001; 2001US-0259678P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-483426/52.
XX
PT   Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS   Disclosure; SEQ ID NO 38239; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting the
CC   nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 476 BP; 59 A; 190 C; 157 G; 70 T; 0 U; 0 Other;

  Query Match             15.1%;  Score 471;  DB 4;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-209;
  Matches  471;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        716 CGGTAGCGCCGAGCGAGTCACGGACCATGAAGAGCGTTCGTGCCGCGCGGCCCAAGGCCG 775
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        476 CGGTAGCGCCGAGCGAGTCACGGACCATGAAGAGCGTTCGTGCCGCGCGGCCCAAGGCCG 417

Qy        776 GGATGGGGGTTAGCCACATCCTGCCGCGCTGAGGGGGAGGCTAACGGGCGCGGGCGGCCG 835
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        416 GGATGGGGGTTAGCCACATCCTGCCGCGCTGAGGGGGAGGCTAACGGGCGCGGGCGGCCG 357

Qy        836 GGCCCAGCCGGAGCCCACCGCGATGGCGAGGGAGGAGTGCAAGGCGCTGCTGGACGGGCT 895
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        356 GGCCCAGCCGGAGCCCACCGCGATGGCGAGGGAGGAGTGCAAGGCGCTGCTGGACGGGCT 297

Qy        896 CAACAAGACGACTGCGTGCTACCACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTC 955
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        296 CAACAAGACGACTGCGTGCTACCACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTC 237

Qy        956 GCAGAACCTGCGGCAGGAGCTGCAAAAGACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTC 1015
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        236 GCAGAACCTGCGGCAGGAGCTGCAAAAGACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTC 177

Qy       1016 CACCTGCGCCCGGCTGACTGCTGTGCTGCGCGACCGGGGCCTGGCCGCCGACGAGCGCGC 1075
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        176 CACCTGCGCCCGGCTGACTGCTGTGCTGCGCGACCGGGGCCTGGCCGCCGACGAGCGCGC 117

Qy       1076 CGAGTTCGAGCGGCTCTGGGTGGCCTTCTCGGGCTGCCTGGACCTGCTGGAAGCGGACAT 1135
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        116 CGAGTTCGAGCGGCTCTGGGTGGCCTTCTCGGGCTGCCTGGACCTGCTGGAAGCGGACAT 57

Qy       1136 GCGACGCTCGCTGGAGCTGGGCGCCGCGTTCCCGCTGCACGCGCCGCGGCG 1186
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          56 GCGACGCTCGCTGGAGCTGGGCGCCGCGTTCCCGCTGCACGCGCCGCGGCG 6


RESULT 12
AAK83426/c
ID   AAK83426 standard; DNA; 476 BP.
XX
AC   AAK83426;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:38238.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
```

XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.

```
XX
PS   Disclosure; SEQ ID NO 38238; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting the
CC   nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 476 BP; 58 A; 191 C; 157 G; 70 T; 0 U; 0 Other;

  Query Match             13.7%;  Score 427;  DB 4;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 9.3e-189;
  Matches  427;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        716 CGGTAGCGCCGAGCGAGTCACGGACCATGAAGAGCGTTCGTGCCGCGCGGCCCAAGGCCG 775
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        476 CGGTAGCGCCGAGCGAGTCACGGACCATGAAGAGCGTTCGTGCCGCGCGGCCCAAGGCCG 417

Qy        776 GGATGGGGGTTAGCCACATCCTGCCGCGCTGAGGGGGAGGCTAACGGGCGCGGGCGGCCG 835
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        416 GGATGGGGGTTAGCCACATCCTGCCGCGCTGAGGGGGAGGCTAACGGGCGCGGGCGGCCG 357

Qy        836 GGCCCAGCCGGAGCCCACCGCGATGGCGAGGGAGGAGTGCAAGGCGCTGCTGGACGGGCT 895
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        356 GGCCCAGCCGGAGCCCACCGCGATGGCGAGGGAGGAGTGCAAGGCGCTGCTGGACGGGCT 297

Qy        896 CAACAAGACGACTGCGTGCTACCACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTC 955
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        296 CAACAAGACGACTGCGTGCTACCACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTC 237

Qy        956 GCAGAACCTGCGGCAGGAGCTGCAAAAGACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTC 1015
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        236 GCAGAACCTGCGGCAGGAGCTGCAAAAGACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTC 177

Qy       1016 CACCTGCGCCCGGCTGACTGCTGTGCTGCGCGACCGGGGCCTGGCCGCCGACGAGCGCGC 1075
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        176 CACCTGCGCCCGGCTGACTGCTGTGCTGCGCGACCGGGGCCTGGCCGCCGACGAGCGCGC 117

Qy       1076 CGAGTTCGAGCGGCTCTGGGTGGCCTTCTCGGGCTGCCTGGACCTGCTGGAAGCGGACAT 1135
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        116 CGAGTTCGAGCGGCTCTGGGTGGCCTTCTCGGGCTGCCTGGACCTGCTGGAAGCGGACAT 57

Qy       1136 GCGACGC 1142
              |||||||
Db          56 GCGACGC 50


RESULT 13
AAS72508/c
ID   AAS72508 standard; cDNA; 1349 BP.
XX
AC   AAS72508;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #8312.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US008631.
XX
PR   31-MAR-2000; 2000US-00540217.
PR   23-AUG-2000; 2000US-00649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG08321.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity.
XX
PS   Claim 1; SEQ ID NO 8312; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC   sequences. (I) is useful as hybridisation probes, polymerase chain
CC   reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC   and in recombinant production of (II). The polynucleotides are also used
CC   in diagnostics as expressed sequence tags for identifying expressed
CC   genes. (I) is useful in gene therapy techniques to restore normal
CC   activity of (II) or to treat disease states involving (II). (II) is
CC   useful for generating antibodies against it, detecting or quantitating a
CC   polypeptide in tissue, as molecular weight markers and as a food
CC   supplement. (II) and its binding partners are useful in medical imaging
CC   of sites expressing (II). (I) and (II) are useful for treating disorders
CC   involving aberrant protein expression or biological activity. The
CC   polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic
CC   coding sequences of the invention. Note: The sequence data for this
CC   patent did not appear in the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 1349 BP; 171 A; 472 C; 483 G; 223 T; 0 U; 0 Other;

  Query Match             7.7%;  Score 241;  DB 5;  Length 1349;
  Best Local Similarity   100.0%;  Pred. No. 7.8e-102;
  Matches  241;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        902 GACGACTGCGTGCTACCACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTCGCAGAA 961
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        402 GACGACTGCGTGCTACCACCACCTGGTGCTGACCGTCGGTGGCTCGGCGGACTCGCAGAA 343

Qy        962 CCTGCGGCAGGAGCTGCAAAAGACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTCCACCTG 1021
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        342 CCTGCGGCAGGAGCTGCAAAAGACGCGCCAGAAGGCGCAGGAGCTGGCGGTGTCCACCTG 283

Qy       1022 CGCCCGGCTGACTGCTGTGCTGCGCGACCGGGGCCTGGCCGCCGACGAGCGCGCCGAGTT 1081
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        282 CGCCCGGCTGACTGCTGTGCTGCGCGACCGGGGCCTGGCCGCCGACGAGCGCGCCGAGTT 223

Qy       1082 CGAGCGGCTCTGGGTGGCCTTCTCGGGCTGCCTGGACCTGCTGGAAGCGGACATGCGACG 1141
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        222 CGAGCGGCTCTGGGTGGCCTTCTCGGGCTGCCTGGACCTGCTGGAAGCGGACATGCGACG 163

Qy       1142 C 1142
              |
Db        162 C 162
```

```
RESULT 14
ABN50582
ID   ABN50582 standard; DNA; 60 BP.
XX
AC   ABN50582;
XX
DT   15-JUL-2002  (first entry)
XX
DE   Human spliced transcript detection oligonucleotide SEQ ID NO:23330.
XX
KW   Human; mouse; rat; splice transcript; detection; RNA transcript;
KW   splice variant; transcriptome; oligonucleotide library; ss.
XX
OS   Homo sapiens.
XX
PN   WO200210449-A2.
XX
PD   07-FEB-2002.
XX
PF   20-JUL-2001; 2001WO-IB001903.
XX
PR   28-JUL-2000; 2000US-0221607P.
PR   02-MAY-2001; 2001US-0287724P.
XX
PA   (COMP-) COMPUGEN INC.
XX
PI   Shoshan A,  Wasserman A,  Mintz E,  Mintz L,  Faigler S;
XX
DR   WPI; 2002-257383/30.
XX
PT   New oligonucleotide libraries comprising oligonucleotides which
PT   selectively hybridize to mRNAs transcribed from a transcription unit of a
PT   genome, useful for detecting tissue-, pathology-, and developmental-
PT   specific genes.
XX
PS   Example 1; SEQ ID NO 23330; 47pp; English.
XX
CC   The present invention describes oligonucleotide libraries for detecting
CC   messenger RNAs that populate a (sub-)transcriptome, where the (sub-
CC   )transcriptome comprises messenger RNAs transcribed from multiple
CC   transcription units that populate a genome. The library comprises several
CC   oligonucleotides, each capable of hybridising selectively to a set of
CC   messenger RNAs transcribed from a given transcription unit of the genome,
CC   which encodes one or more messenger RNA splice variants. The
CC   oligonucleotide libraries are useful for detecting mRNAs from a
CC   biological sample, in expression profiling studies, in qualitatively or
CC   quantitatively characterising the corresponding transcriptome, and in
CC   detecting RNA transcripts and splice variants of human or animal
CC   transcriptomes. The libraries may also be used as specialised mini
CC   libraries to detect transcripts of a sub-transcriptome under a particular
CC   biological or pathological state, and so allowing the detection of tissue
CC   - and pathology-specific genes such as those genes only expressed in
CC   specific tissue under a specific pathological condition; to detect
CC   developmental specific genes; and to detect RNA transcripts and splice
CC   variants of a transcriptome of a patient suffering from a particular
CC   disorder. ABN27253 to ABN59589 represent oligonucleotide sequences from
CC   rats, humans and mice, which are used in the exemplification of the
CC   present invention. N.B. The sequence data for this patent did not form
CC   part of the printed specification, but was obtained in electronic format
CC   directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 60 BP; 11 A; 14 C; 16 G; 19 T; 0 U; 0 Other;

  Query Match             1.9%;  Score 60;  DB 6;  Length 60;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-17;
  Matches   60;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2464 GGGCTGGGAATCCTCTTTAGAGCACTTAATCCTATTTATCCCCTGGAATGTGCGTGCTGG 2523
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 GGGCTGGGAATCCTCTTTAGAGCACTTAATCCTATTTATCCCCTGGAATGTGCGTGCTGG 60
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RESULT 15
ABK83571/c
ID   ABK83571 standard; cDNA; 175737 BP.
XX
AC   ABK83571;
XX
DT   14-AUG-2002  (first entry)
XX
DE   Human cDNA differentially expressed in granulocytic cells #142.
XX
KW   Human; ss; granulocytic cell; DNA chip; bacterial infection;
KW   viral infection; parasitic infection; protozoal infection;
KW   fungal infection; sterile inflammatory disease; psoriasis;
KW   rheumatoid arthritis; glomerulonephritis; asthma; thrombosis;
KW   cardiac reperfusion injury; renal reperfusion injury; ARDS;
KW   adult respiratory distress syndrome; inflammatory bowel disease;
KW   Crohn's disease; ulcerative colitis; periodontal disease;
KW   granulocyte activation; chronic inflammation; allergy.
XX
OS   Homo sapiens.
XX
PN   WO200228999-A2.
XX
PD   11-APR-2002.
XX
PF   03-OCT-2001; 2001WO-US030821.
XX
PR   03-OCT-2000; 2000US-0237189P.
XX
PA   (GENE-) GENE LOGIC INC.
XX
PI   Beazer-Barclay Y,  Weissman SM,  Yamaga S,  Vockley J;
XX
DR   WPI; 2002-435328/46.
XX
PT   Detecting granulocyte activation by detecting differential expression of
PT   genes associated with granulocyte activation, which serves as diagnostic
PT   markers that is useful for monitoring disease states and drug toxicity.
XX
PS   Claim 1; SEQ ID NO 142; 114pp; English.
XX
CC   The invention relates to detecting (M1) granulocyte (GC) activation
CC   (GCA), by detecting the level of expression of gene(s) (Gs) identified by
CC   DNA chip analysis as given in the specification, and comparing the
CC   expression level to an expression level in an unactivated GC, where
CC   differential expression of Gs is indicative of GCA. Also included are
CC   modulating (M2) GA by contacting GC with an agent that alters the
CC   expression of at least one gene in Gs; (2) screening (M3) for an agent
CC   capable of modulating GCA or an inflammation (especially chronic) in a
CC   tissue, an allergic response in a subject, exposure of a subject to a
CC   pathogen or sterile inflammatory disease using the gene expression
CC   profile; (3) detecting (M4) an inflammation (especially chronic) in a
CC   tissue, an allergic response in a subject, exposure of a subject to a
CC   pathogen or sterile inflammatory disease, by detecting the level of
CC   expression in a sample of the tissue of gene(s) from Gs, where the level
CC   of expression of the gene is indicative of inflammation; (4) treating
CC   (M5) an inflammation (especially chronic) or in a tissue, an allergic
CC   response in a subject, exposure of a subject to a pathogen or sterile
CC   inflammatory disease, by contacting a tissue having inflammation with an
CC   agent that modulates the expression of gene(s) from Gs in the tissue. M1
CC   is useful for detecting GCA; M2 is useful for modulating GA; M3 is useful
CC   for screening an agent capable of modulating GCA preferably in an
CC   inflammation in a tissue; M4 is useful for detecting an inflammation
CC   (especially chronic) in a tissue, an allergic response in a subject,
CC   exposure of a subject to a pathogen or sterile inflammatory disease (e.g.
CC   psoriasis, rheumatoid arthritis, glomerulonephritis, asthma, thrombosis,
CC   cardiac reperfusion injury, renal reperfusion injury, ARDS, adult
CC   respiratory distress syndrome, inflammatory bowel disease, Crohn's
CC   disease, ulcerative colitis, periodontal disease; also bacterial
CC   infection, viral infection, parasitic infection, protozoal infection,
CC   fungal infection and M5 is useful for treating one of the above
CC   conditions. The present sequence represents a gene differentially
CC   expressed in granulocytes. Note: The sequence data for this patent did
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CC   not form part of the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 175737 BP; 41985 A; 43790 C; 42407 G; 47555 T; 0 U; 0 Other;

  Query Match             1.7%;  Score 53;  DB 6;  Length 175737;
  Best Local Similarity   100.0%;  Pred. No. 4.9e-14;
  Matches   53;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2888 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      47829 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 47777


RESULT 16
ADL13596/c
ID   ADL13596 standard; DNA; 175737 BP.
XX
AC   ADL13596;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Osteoarthritis-associated polymorphic nucleotide #128.
XX
KW   ds; gene; osteopathic; antiinflammatory; antiarthritic; gene therapy;
KW   joint space narrowing; osteophyte development; joint pain;
KW   osteoarthritis; SNP; single nucleotide polymorphism.
XX
OS   Homo sapiens.
XX
PN   WO2003054166-A2.
XX
PD   03-JUL-2003.
XX
PF   19-DEC-2002; 2002WO-US041225.
XX
PR   20-DEC-2001; 2001US-0342603P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Jones KA,  Schafer A;
XX
DR   WPI; 2003-559141/52.
XX
PT   Determining susceptibility of an individual to joint space narrowing,
PT   osteophyte development and/or joint pain comprises identifying whether
PT   the individual has at least one polymorphism in a polynucleotide encoding
PT   a protein.
XX
PS   Disclosure; SEQ ID NO 128; 297pp; English.
XX
CC   The invention relates to a method of determining susceptibility of an
CC   individual to joint space narrowing and/or osteophyte development and/or
CC   joint pain comprising identifying whether the individual has at least one
CC   polymorphism in a polynucleotide encoding at least one of the protein
CC   listed in the specification. The methods, composition and agent are
CC   useful for modulating the susceptibility of an individual to joint space
CC   narrowing and/or osteophyte development and/or joint pain that is
CC   associated with a disease, preferably osteoarthritis. The cell line and
CC   the non-human animal are useful for screening for an agent for diagnosing
CC   an individual having susceptibility to joint space narrowing and/or
CC   osteophyte development and/or joint pain. This sequence corresponds to
CC   the polynucleotide encoding a protein listed in the specification. (Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification but was obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences).
XX
SQ   Sequence 175737 BP; 41985 A; 43790 C; 42407 G; 47555 T; 0 U; 0 Other;

  Query Match             1.7%;  Score 53;  DB 10;  Length 175737;
  Best Local Similarity   100.0%;  Pred. No. 4.9e-14;
  Matches   53;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2888 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      47829 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 47777


RESULT 17
ADQ18934/c
ID   ADQ18934 standard; DNA; 175737 BP.
XX
AC   ADQ18934;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Human soft tissue sarcoma-upregulated DNA - SEQ ID 1753.
XX
KW   soft tissue sarcoma; cytostatic; gene therapy; vaccine; screening; human;
KW   ds.
XX
OS   Homo sapiens.
XX
PN   WO2004048938-A2.
XX
PD   10-JUN-2004.
XX
PF   26-NOV-2003; 2003WO-US038193.
XX
PR   26-NOV-2002; 2002US-0429739P.
XX
PA   (PROT-) PROTEIN DESIGN LABS INC.
XX
PI   Aziz N,  Ginsburg WM,  Zlotnik A;
XX
DR   WPI; 2004-441208/41.
XX
PT   Early detection of soft tissue sarcoma comprises determining expression
PT   of a gene in a first soft tissue sample and a normal soft tissue sample
PT   and comparing the gene expression, also useful in treating soft tissue
PT   sarcoma.
XX
PS   Example 2; SEQ ID NO 1753; 210pp; English.
XX
CC   The invention relates to a novel method for detecting soft tissue sarcoma
CC   which comprises obtaining a first soft tissue sample from an individual
CC   and a normal soft tissue sample from the same or different individual,
CC   determining the expression of a gene in both samples and comparing the
CC   expression of the gene in both soft tissue samples, where a higher level
CC   of protein expression in the first soft tissue sample indicates the
CC   presence of soft tissue sarcoma. The method of the invention has
CC   cytostatic applications and may be useful for detecting soft tissue
CC   sarcoma, possibly via gene therapy or vaccine production. The nucleic
CC   acid sequences may be useful in diagnostic and screening applications.
CC   The current sequence is that of a human soft tissue sarcoma-upregulated
CC   DNA of the invention. The current sequence is not shown within the
CC   specification per se but was submitted in CD format by the inventor.
XX
SQ   Sequence 175737 BP; 41985 A; 43790 C; 42407 G; 47555 T; 0 U; 0 Other;

  Query Match             1.7%;  Score 53;  DB 12;  Length 175737;
  Best Local Similarity   100.0%;  Pred. No. 4.9e-14;
  Matches   53;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2888 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      47829 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 47777


RESULT 18
AAC03795/c
ID   AAC03795 standard; cDNA; 381 BP.
XX
AC   AAC03795;
XX
```

```
DT   06-OCT-2000  (first entry)
XX
DE   Human secreted protein 5' EST, SEQ ID NO: 3793.
XX
KW   Human; 5' EST; expressed sequence tag; secreted protein; cDNA isolation;
KW   gene therapy; chromosome mapping; ss.
XX
OS   Homo sapiens.
XX
PN   EP1033401-A2.
XX
PD   06-SEP-2000.
XX
PF   21-FEB-2000; 2000EP-00200610.
XX
PR   26-FEB-1999;   99US-0122487P.
XX
PA   (GEST ) GENSET.
XX
PI   Dumas Milne Edwards J,  Duclert A,  Giordano J;
XX
DR   WPI; 2000-500381/45.
DR   P-PSDB; AAG03789.
XX
PT   New nucleic acid that is a 5' expressed sequence tag (5' EST) for
PT   obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for
PT   diagnostic, forensic, gene therapy and chromosome mapping procedures.
XX
PS   Claim 1; SEQ ID NO 3793; 71pp + Sequence Listing; English.
XX
CC   The present sequence is one of a large number of 5' ESTs derived from
CC   mRNAs encoding secreted proteins. An ORF has been identified within the
CC   sequence. The 5' ESTs were prepared from total human RNAs or polyA+ RNAs
CC   derived from 30 different tissues. EST sequences usually correspond
CC   mainly to the 3' untranslated region (UTR) of the mRNA because they are
CC   often obtained from oligo-dT primed cDNA libraries. Such ESTs are not
CC   well suited for isolating cDNA sequences derived from the 5' ends of
CC   mRNAs and even in those cases where longer cDNA sequences have been
CC   obtained, the full 5' UTR is rarely included. 5' ESTs are derived from
CC   mRNAs with intact 5' ends and can therefore be used to obtain full length
CC   cDNAs and genomic DNAs. 5' ESTs are also used in diagnostic, forensic,
CC   gene therapy and chromosome mapping procedures. They are used to obtain
CC   upstream regulatory sequences and to design expression and secretion
CC   vectors
XX
SQ   Sequence 381 BP; 73 A; 98 C; 84 G; 123 T; 0 U; 3 Other;

  Query Match             1.7%;  Score 52;  DB 3;  Length 381;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-13;
  Matches   52;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        107 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 56


RESULT 19
AAS78337/c
ID   AAS78337 standard; cDNA; 1437 BP.
XX
AC   AAS78337;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #14141.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US008631.
XX
PR   31-MAR-2000; 2000US-00540217.
PR   23-AUG-2000; 2000US-00649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG14150.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity.
XX
PS   Claim 1; SEQ ID NO 14141; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC   sequences. (I) is useful as hybridisation probes, polymerase chain
CC   reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC   and in recombinant production of (II). The polynucleotides are also used
CC   in diagnostics as expressed sequence tags for identifying expressed
CC   genes. (I) is useful in gene therapy techniques to restore normal
CC   activity of (II) or to treat disease states involving (II). (II) is
CC   useful for generating antibodies against it, detecting or quantitating a
CC   polypeptide in tissue, as molecular weight markers and as a food
CC   supplement. (II) and its binding partners are useful in medical imaging
CC   of sites expressing (II). (I) and (II) are useful for treating disorders
CC   involving aberrant protein expression or biological activity. The
CC   polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic
CC   coding sequences of the invention. Note: The sequence data for this
CC   patent did not appear in the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 1437 BP; 282 A; 398 C; 395 G; 362 T; 0 U; 0 Other;

  Query Match             1.7%;  Score 52;  DB 5;  Length 1437;
  Best Local Similarity   100.0%;  Pred. No. 1.7e-13;
  Matches   52;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        243 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 192


RESULT 20
AAL06207/c
ID   AAL06207 standard; DNA; 9620 BP.
XX
AC   AAL06207;
XX
DT   21-NOV-2001  (first entry)
XX
DE   Human reproductive system related antigen DNA SEQ ID NO: 8895.
XX
KW   Human; reproductive system related antigen; reproductive system disorder;
KW   cancer; gene therapy; ds.
XX
OS   Homo sapiens.
XX
PN   WO200155320-A2.
XX
PD   02-AUG-2001.
XX
```

PF 17-JAN-2001; 2001WO-US001339.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-465570/50.
XX
PT Isolated nucleic acid molecule encoding a reproductive system antigen is

```
PT   used in preventing, treating or ameliorating a medical condition.
XX
PS   Disclosure; SEQ ID NO 8895; 1297pp + Sequence Listing; English.
XX
CC   The present invention provides the protein and coding sequences of a
CC   number of human reproductive system related antigens. These can be used
CC   in the prevention and treatment of reproductive system disorders,
CC   including cancer. The present sequence is a genomic sequence encoding a
CC   protein of the invention
XX
SQ   Sequence 9620 BP; 2586 A; 2358 C; 2358 G; 2318 T; 0 U; 0 Other;

  Query Match             1.7%;  Score 52;  DB 4;  Length 9620;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-13;
  Matches   52;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       7058 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 7007


RESULT 21
AAD31364
ID   AAD31364 standard; DNA; 92139 BP.
XX
AC   AAD31364;
XX
DT   31-MAY-2002  (first entry)
XX
DE   92Kb gene fragment in human chromosome 17 at 17q21.
XX
KW   Human; Van Buchem's disease; genomic deletion; craniotubular hypertosis;
KW   autosomal recessive disorder; chromosome 17; chromosome 17q21;
KW   bone dysplasia; 92Kb gene fragment; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    5799. .57515
FT                   /*tag=  a
FT                   /note= "This region is deleted in individuals afflicted
FT                   or carriers of Van Buchem's disease"
XX
PN   WO200210455-A2.
XX
PD   07-FEB-2002.
XX
PF   30-JUL-2001; 2001WO-US023968.
XX
PR   28-JUL-2000; 2000US-0221855P.
PR   06-JUL-2001; 2001US-0303386P.
XX
PA   (CELL-) CELLTECH R & D INC.
PA   (STRA/) STRAEHLING HAMPTON K.
XX
PI   Brunkow ME,  Proll S,  Paeper B;
XX
DR   WPI; 2002-227089/28.
XX
PT   Methods for identifying subjects who are afflicted with or carriers of
PT   diseases associated with genomic deletion(s), e.g. Van Buchem's disease,
PT   by determining the presence of a deletion in the 92 kb region of human
PT   chromosome 17 at 17q21.
XX
PS   Claim 14; Page 45-72; 109pp; English.
XX
CC   The present invention relates to methods for distinguishing between
CC   individuals homozygous for and therefore afflicted with Van Buchem's
CC   disease, individuals heterozygous for and therefore carriers of Van
CC   Buchem's disease and individuals who are not afflicted with Van Buchems's
CC   disease comprise identifying a large genomic deletion in chromosome 17 at
CC   17q21. The method is useful for identifying individuals who are afflicted
CC   with or carriers of diseases associated with one or more genomic
CC   deletion, particularly Van Buchem's disease, which is a rare autosomal
CC   recessive disorder that results in a bone dysplasia referred to a
CC   craniotubular hypertosis. The present sequence is a 92Kb gene fragment in
CC   human chromosome 17 at 17q21
XX
SQ   Sequence 92139 BP; 23017 A; 22243 C; 23264 G; 23612 T; 0 U; 3 Other;

  Query Match             1.7%;  Score 52;  DB 6;  Length 92139;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-13;
  Matches   52;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2889 GAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
             ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      85294 GAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 85345


RESULT 22
ADF11613/c
ID   ADF11613 standard; DNA; 130320 BP.
XX
AC   ADF11613;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Human sclerostin gene region.
XX
KW   ds; osteopathic; gene therapy; bone mineral density;
KW   sclerostin gene region; osteoporosis; osteopenia; bone dysplasia;
KW   bone fracture.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   variation       replace(4103,G)
FT                   /*tag=  a
FT   variation       replace(10357,T)
FT                   /*tag=  b
FT   variation       replace(10565. .10566,AGGAC)
FT                   /*tag=  c
FT   variation       replace(17966,G)
FT                   /*tag=  d
FT   variation       replace(18293,G)
FT                   /*tag=  e
FT   variation       replace(58083,C)
FT                   /*tag=  f
FT   variation       replace(74235,G)
FT                   /*tag=  g
FT   variation       replace(91068,G)
FT                   /*tag=  h
XX
PN   WO2003087763-A2.
XX
PD   23-OCT-2003.
XX
PF   03-APR-2003; 2003WO-US010649.
XX
PR   03-APR-2002; 2002US-0370088P.
XX
PA   (CELL-) CELLTECH R & D INC.
PA   (UYRO-) UNIV ROTTERDAM ERASMUS.
XX
PI   Brunkow ME,  Charmley PR,  Proll S,  Paeper BW,  Uitterlinden AG;
XX
DR   WPI; 2003-833790/77.
XX
PT   Determining a risk for or presence of altered bone mineral density (e.g.
PT   osteoporosis) in a subject comprises determining the presence or absence
PT   of a sclerostin gene region nucleotide polymorphism in a biological
PT   sample from a subject.
XX
PS   Claim 21; SEQ ID NO 1; 114pp; English.
XX
CC   The invention relates to a method of determining a risk for or presence
```

```
CC   of altered bone mineral density (BMD) in a subject by determining the
CC   presence or absence of at least one sclerostin gene region nucleotide
CC   polymorphism in a biological sample from a subject where the presence of
CC   at least one polymorphism at a position that corresponds to a non-coding
CC   region of the 130320 bp sclerostin gene region (SOST) indicates an
CC   increased risk of altered BMD. The composition and methods are useful in
CC   determining in a subject a risk for having, or presence of, altered bone
CC   mineral density, such as osteoporosis, osteopenia, bone dysplasia, bone
CC   fracture or other conditions characterized by decreased or increased bone
CC   density. These may also be used in identifying agents that may be used
CC   for treating the above diseases, disorders or conditions associated with
CC   altered BMD. In addition, these may be used for pharmacogenomic purposes,
CC   e.g. to stratify patient populations according to suitability of a
CC   particular therapeutic agent for use in the population. This sequence
CC   corresponds to the human sclerostin gene region.
XX
SQ   Sequence 130320 BP; 33204 A; 32954 C; 31896 G; 32253 T; 0 U; 13 Other;

  Query Match             1.7%;  Score 52;  DB 10;  Length 130320;
  Best Local Similarity   100.0%;  Pred. No. 1.4e-13;
  Matches   52;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2889 GAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
             ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      23819 GAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 23768


RESULT 23
ADG86300
ID   ADG86300 standard; DNA; 220756 BP.
XX
AC   ADG86300;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human SMRT partial genomic DNA sequence SEQ ID NO:14.
XX
KW   SMRT; silencing mediator for retinoid and thyroid hormone action;
KW   SMRT inhibitor; cytostatic; antiinflammatory; antiarthritic;
KW   antirheumatic; antisense therapy; inflammatory disorder;
KW   rheumatoid arthritis; hyperproliferative disorder; cancer; leukaemia;
KW   breast cancer; human; gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003106645-A2.
XX
PD   24-DEC-2003.
XX
PF   17-JUN-2003; 2003WO-US018923.
XX
PR   17-JUN-2002; 2002US-00174014.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Freier SM,  Dobie KW;
XX
DR   WPI; 2004-082184/08.
DR   GENBANK; NT_009459.
XX
PT   Novel antisense compound targeted to nucleic acid encoding SMRT
PT   (silencing mediator for retinoid and thyroid hormone action), useful for
PT   treating animal having disease associated with SMRT such as cancer,
PT   rheumatoid arthritis.
XX
PS   Example 15; SEQ ID NO 14; 260pp; English.
XX
CC   The present invention describes a compound (I) 8-50 nucleobases in length
CC   targeted to a nucleic acid molecule encoding SMRT (silencing mediator for
CC   retinoid and thyroid hormone action), where (I) specifically hybridises
CC   with the nucleic acid molecule encoding SMRT and inhibits expression of
CC   SMRT. (I) specifically hybridises with at least 8-nucleobase portion of a
CC   preferred target region on nucleic acid molecule encoding SMRT. Also
CC   described is a composition (II) comprising (I) and a carrier or diluent.
CC   (I) and (II) have cytostatic, antiinflammatory, antiarthritic and
CC   antirheumatic activities, and can be used in antisense therapy, and as
CC   SMRT expression inhibitors. (I) is useful for inhibiting the expression
CC   of SMRT in cells or tissues. (I) is also useful for treating an animal
CC   having a disease or condition associated with SMRT, e.g., inflammatory
CC   disorder such as rheumatoid arthritis; or a hyperproliferative disorder
CC   such as cancer chosen from leukaemia and breast cancer, by inhibiting the
CC   expression of SMRT. (I) is useful for diagnostics, therapeutics,
CC   prophylaxis and as research reagents and kits. The present sequence
CC   represents a partial genomic DNA sequence of human SMRT, which is used in
CC   an example from the present invention. N.B. The present sequence is
CC   designated as SEQ ID NO:12 in example 15 but corresponds to SEQ ID NO:14
CC   in the Sequence Listing.
XX
SQ   Sequence 220756 BP; 42894 A; 60607 C; 65347 G; 51195 T; 0 U; 713 Other;

  Query Match             1.7%;  Score 52;  DB 12;  Length 220756;
  Best Local Similarity   100.0%;  Pred. No. 1.4e-13;
  Matches   52;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     172979 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 173030


RESULT 24
ACN44282
ID   ACN44282 standard; DNA; 233380 BP.
XX
AC   ACN44282;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Human genomic sequence hCG25303.
XX
KW   Cytostatic; carcinoma; lymphoma; cancer; human; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003073826-A2.
XX
PD   12-SEP-2003.
XX
PF   28-FEB-2003; 2003WO-US006235.
XX
PR   01-MAR-2002; 2002US-00087192.
XX
PA   (SAGR-) SAGRES DISCOVERY.
XX
PI   Morris DW;
XX
DR   WPI; 2003-328604/31.
XX
PT   Recombinant nucleic acid useful for diagnosis and treatment of carcinoma
PT   comprises a nucleotide sequence.
XX
PS   Claim 1; SEQ ID NO 652; 0pp; English.
XX
CC   The present invention relates to novel DNA and protein sequences which
CC   are associated with carcinomas. The sequences are useful for: (i) for
CC   screening drug candidates; (ii) for screening of bioactive agent capable
CC   of binding to Carcinoma Associated Protein (CAP); (iii) for screening of
CC   a bioactive agent capable of modulating the activity of CAP; (iv) for
CC   evaluating the effect of a candidate carcinoma drug; (v) for diagnosing
CC   carcinoma; (vi) for inhibiting the activity of CAP; (vii) for treating
CC   carcinoma; (viii) for neutralizing the effect of CAP; (ix) as a biochip;
CC   (x) for diagnosing carcinoma or a propensity to carcinoma; and (xi) for
CC   determining Carcinoma Associated (CA) gene copy number. In addition, the
CC   CA genes are useful as DNA vaccines and the CAP are useful as markers of
CC   carcinoma including lymphoma. The present sequence is one such CA coding
CC   sequence. Note: This patent is an equivalent to basic patent
CC   US2002182586A1, for which no sequence data was published
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XX
SQ   Sequence 233380 BP; 44357 A; 63089 C; 67702 G; 51928 T; 0 U; 6304 Other;

  Query Match             1.7%;  Score 52;  DB 11;  Length 233380;
  Best Local Similarity   100.0%;  Pred. No. 1.4e-13;
  Matches   52;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     179881 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 179932


RESULT 25
AAF21833/c
ID   AAF21833 standard; DNA; 832 BP.
XX
AC   AAF21833;
XX
DT   27-MAR-2001  (first entry)
XX
DE   Human breast and ovarian cancer associated antigen gene SEQ ID 220.
XX
KW   Human; breast cancer; ovarian cancer; cytostatic; immunosuppressive;
KW   nootropic; neurpprotective; antiviral; antiallergic; hepatotropic;
KW   antidiabetic; antiinflammatory; antiulcer; vulnerary; anticonvulsant;
KW   antibacterial; antifungal; antiparasitic; cardiant; immune disorder;
KW   Addison's disease; allergy; autoimmune haemolytic anaemia;
KW   autoimmune thyroiditis; diabetes mellitus; Crohn's disease;
KW   multiple sclerosis; rheumatoid arthritis; ulcerative colitis;
KW   cardiovascular disorder; wound healing; neurological disease; ds.
XX
OS   Homo sapiens.
XX
PN   WO200055173-A1.
XX
PD   21-SEP-2000.
XX
PF   08-MAR-2000; 2000WO-US005881.
XX
PR   12-MAR-1999;   99US-0124270P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM;
XX
DR   WPI; 2000-611515/58.
DR   P-PSDB; AAB58930.
XX
PT   New human breast and ovarian cancer associated gene sequences and the
PT   polypeptides encoded by these genes, useful in the prevention, treatment
PT   and diagnosis of cancer, immune disorders, cardiovascular disorders and
PT   neurological diseases.
XX
PS   Claim 1; Page 646-647; 1299pp; English.
XX
CC   Sequences AAF21614 - AAF22031 represent DNA sequences encoding human
CC   proteins AAB58711 - AAB59128. The DNA and protein sequences are
CC   associated with breast and ovarian cancer. Included in the invention are
CC   sequences AAF22032 - AAF22040 and AAB59129 which are used in the
CC   isolation and characterisation of the DNA and protein sequences of the
CC   invention. The breast and ovarian cancer associated DNA, protein, agonist
CC   or antagonist sequences exhibit cytostatic; immunosuppressive; nootropic;
CC   neuroprotective; antiviral; antiallergic; hepatotropic; antidiabetic;
CC   antiinflammatory; antiulcer; vulnerary; anticonvulsant; antibacterial;
CC   antifungal; antiparasitic and cardiant activity. The polynucleotide and
CC   protein sequences are used in the diagnosis of cancer, particularly
CC   breast and ovarian cancer. The nucleic acid sequences, proteins, agonists
CC   and agonists may also be used in the diagnosis, prevention and treatment
CC   of immune disorders e.g. Addison's disease, allergies, autoimmune
CC   haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's
CC   disease, multiple sclerosis, rheumatoid arthritis and ulcerative colitis;
CC   cardiovascular disorders such as myocardial ischaemias; wound healing;
CC   neurological diseases such as cerebral anoxia and epilepsy; and
CC   infectious diseases
XX
SQ   Sequence 832 BP; 224 A; 171 C; 178 G; 257 T; 0 U; 2 Other;

  Query Match             1.6%;  Score 51;  DB 3;  Length 832;
  Best Local Similarity   100.0%;  Pred. No. 5.1e-13;
  Matches   51;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2890 AGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
              |||||||||||||||||||||||||||||||||||||||||||||||||||
Db         76 AGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 26


RESULT 26
AAS93730
ID   AAS93730 standard; cDNA; 2791 BP.
XX
AC   AAS93730;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #29534.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US008631.
XX
PR   31-MAR-2000; 2000US-00540217.
PR   23-AUG-2000; 2000US-00649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG29543.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity.
XX
PS   Claim 1; SEQ ID NO 29534; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC   sequences. (I) is useful as hybridisation probes, polymerase chain
CC   reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC   and in recombinant production of (II). The polynucleotides are also used
CC   in diagnostics as expressed sequence tags for identifying expressed
CC   genes. (I) is useful in gene therapy techniques to restore normal
CC   activity of (II) or to treat disease states involving (II). (II) is
CC   useful for generating antibodies against it, detecting or quantitating a
CC   polypeptide in tissue, as molecular weight markers and as a food
CC   supplement. (II) and its binding partners are useful in medical imaging
CC   of sites expressing (II). (I) and (II) are useful for treating disorders
CC   involving aberrant protein expression or biological activity. The
CC   polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic
CC   coding sequences of the invention. Note: The sequence data for this
CC   patent did not appear in the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
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```
SQ   Sequence 2791 BP; 559 A; 763 C; 784 G; 685 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 51;  DB 5;  Length 2791;
  Best Local Similarity   100.0%;  Pred. No. 4.9e-13;
  Matches   51;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        465 CCTAAGGCGGAGCGCGCGGCTCTGCAGCCTGCTTGCCCCGGAGTTGGCACC 515
              |||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1538 CCTAAGGCGGAGCGCGCGGCTCTGCAGCCTGCTTGCCCCGGAGTTGGCACC 1588


RESULT 27
AEA61112/c
ID   AEA61112 standard; DNA; 23139 BP.
XX
AC   AEA61112;
XX
DT   25-AUG-2005  (first entry)
XX
DE   Human SLC26A2 gene genomic sequence SEQ ID NO:22.
XX
KW   DNA methylation; biomarker; cancer; gene; ds; SLC26A2.
XX
OS   Homo sapiens.
XX
PN   US2005130172-A1.
XX
PD   16-JUN-2005.
XX
PF   27-JAN-2004; 2004US-00765790.
XX
PR   16-DEC-2003; 2003US-00737082.
XX
PA   (FARB ) BAYER CORP.
XX
PI   Beard C,  Burgess C,  Gannon A,  Harvey J,  Lechner JF,  Li Z;
XX
DR   WPI; 2005-456991/46.
DR   GENBANK; AI025519.
XX
PT   Identifying nucleic acid sequences as biomarker for disease, by
PT   identifying nucleic acid sequences comprising methylated CpG site and
PT   down-regulated in diseased cells and comparing its expression level with
PT   demethylated nucleic acid.
XX
PS   Claim 11; SEQ ID NO 22; 27pp; English.
XX
CC   The invention relates to a method (M1) for identifying one or more
CC   nucleic acid sequences useful as a biomarker for a disease to be
CC   detected. (M1) involves identifying nucleic acid sequences comprising
CC   methylated CpG site in promoter-first exon region and that are down-
CC   regulated in diseased cells, comparing expression level of nucleic acid
CC   sequences with that of demethylated nucleic acid sequences and
CC   identifying nucleic acid sequences exhibiting increase in expression
CC   after demethylation. Also described: (1) detecting (M2) the presence or
CC   stage of a disease in a subject, which involves determining the degree of
CC   methylation of one or more CpG sites on nucleic acid sequences in a
CC   biological sample obtained from the subject, and determining the presence
CC   of, predisposition to, or stage of the disease in the subject based on
CC   the degree of methylation; (2) monitoring the onset, progression, or
CC   regression of a disease in a subject; (3) determining the efficacy of a
CC   test compound for inhibiting a disease in a subject; and (4) a kit (I)
CC   useful for diagnosis, prognosis, staging, monitoring, and therapeutic
CC   treatment of a disease. (M1) is useful for identifying one or more
CC   nucleic acid sequences useful as a biomarker for a disease to be
CC   detected, where the nucleic acid sequences are useful for detecting, the
CC   presence or stage of a disease such as cancer e.g. colorectal cancer in a
CC   subject. The present sequence represents a specifically claimed human
CC   genomic sequence for use in the method of the invention. Note - The
CC   sequence data for this patent is not represented in the printed
CC   specification but was obtained in electronic format from the USPTO web
CC   site.
XX

SQ   Sequence 23139 BP; 6124 A; 4783 C; 4952 G; 7280 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 51;  DB 14;  Length 23139;
  Best Local Similarity   100.0%;  Pred. No. 4.5e-13;
  Matches   51;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2890 AGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
              |||||||||||||||||||||||||||||||||||||||||||||||||||
Db       3783 AGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 3733


RESULT 28
AAK67239
ID   AAK67239 standard; DNA; 30393 BP.
XX
AC   AAK67239;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:22051.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
PR   16-MAR-2000; 2000US-0189874P.
PR   17-MAR-2000; 2000US-0190076P.
PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
PR   14-JUL-2000; 2000US-0218290P.
PR   26-JUL-2000; 2000US-0220963P.
PR   26-JUL-2000; 2000US-0220964P.
PR   14-AUG-2000; 2000US-0224518P.
PR   14-AUG-2000; 2000US-0224519P.
PR   14-AUG-2000; 2000US-0225213P.
PR   14-AUG-2000; 2000US-0225214P.
PR   14-AUG-2000; 2000US-0225266P.
PR   14-AUG-2000; 2000US-0225267P.
PR   14-AUG-2000; 2000US-0225268P.
PR   14-AUG-2000; 2000US-0225270P.
PR   14-AUG-2000; 2000US-0225447P.
PR   14-AUG-2000; 2000US-0225757P.
PR   14-AUG-2000; 2000US-0225758P.
PR   14-AUG-2000; 2000US-0225759P.
PR   18-AUG-2000; 2000US-0226279P.
PR   22-AUG-2000; 2000US-0226681P.
PR   22-AUG-2000; 2000US-0226868P.
PR   22-AUG-2000; 2000US-0227182P.
PR   23-AUG-2000; 2000US-0227009P.
PR   30-AUG-2000; 2000US-0228924P.
PR   01-SEP-2000; 2000US-0229287P.
PR   01-SEP-2000; 2000US-0229343P.
PR   01-SEP-2000; 2000US-0229344P.
PR   01-SEP-2000; 2000US-0229345P.
PR   05-SEP-2000; 2000US-0229509P.
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PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 22051; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 30393 BP; 8271 A; 7315 C; 8076 G; 6731 T; 0 U; 0 Other;

Query Match 1.6%; Score 51; DB 4; Length 30393;
Best Local Similarity 100.0%; Pred. No. 4.5e-13;
Matches 51; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 3121
||||||||||||||||||||||||||||||||||||||||||||||||||
Db 24742 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 24792

RESULT 29
ADX80722/c
ID ADX80722 standard; DNA; 68200 BP.
XX
AC ADX80722;
XX
DT 05-MAY-2005 (first entry)
XX
DE Human mannose receptor C type 2 (ENDO180) genomic DNA.
XX

```
KW   melanoma; DNA polymorphism; SNP detection; cytostatic; gene therapy; SNP;
KW   single nucleotide polymorphism; gene; ds; chromosome 17.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   variation       224
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       1874
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FT   variation       2215
FT                   /*tag= c
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FT   variation       7585
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FT   variation       8025
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT   variation       50836
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       51853
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FT   variation       51946
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       57864
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       59414
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       60074
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       65721
FT                   /*tag= au
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FT   variation       67995
FT                   /*tag=  av
FT                   /standard_name= "Single nucleotide polymorphism"
XX
PN   WO2005017176-A2.
XX
PD   24-FEB-2005.
XX
PF   05-MAY-2004; 2004WO-US014238.
XX
PR   23-JUL-2003; 2003US-0489703P.
PR   06-NOV-2003; 2003US-00703789.
PR   06-NOV-2003; 2003US-00703817.
PR   06-NOV-2003; 2003US-00704513.
XX
PA   (SEQU-) SEQUENOM INC.
XX
PI   Roth RB,  Nelson MR,  Kammerer SM,  Braun A,  Hoyal-Wrightson CR;
XX
DR   WPI; 2005-182387/19.
DR   P-PSDB; ADX80739.
XX
PT   Identifying a subject at risk of melanoma by detecting presence or
PT   absence of a polymorphic variation associated with melanoma, where the
PT   presence of polymorphic variations is indicative of the subject being at
PT   risk of melanoma.
XX
PS   Claim 16; SEQ ID NO 3; 418pp; English.
XX
CC   The invention relates to a novel method for identifying a subject at risk
CC   of melanoma. The method comprises detecting the presence or absence of a
CC   polymorphic variation associated with melanoma, where the presence of the
CC   one or more polymorphic variations is indicative of the subject being at
CC   risk of melanoma. The invention further comprises: a method for
CC   identifying a polymorphic variation associated with melanoma proximal to
CC   an incident polymorphic variation associated with melanoma; an isolated
CC   nucleic acid which comprises a portion of or all of a nucleotide sequence
CC   comprising fully defined 68400-213300 base pairs sequences (SEQ ID NO. 3,
CC   4, 5, 6, and/or 7) given in the specification, and comprises one or more
CC   polymorphic variations; an oligonucleotide comprising a nucleotide
CC   sequence complementary to a portion of the nucleotide sequence above,
CC   where the 3' end of the oligonucleotide is adjacent to a polymorphic
CC   variation; a microarray comprising the isolated nucleic acid linked to a
CC   solid support; an isolated polypeptide encoded by the isolated nucleic
CC   acid sequence; genotyping a nucleic acid; a method for identifying a

  Query Match             1.6%;  Score 51;  DB 14;  Length 68200;
  Best Local Similarity   100.0%;  Pred. No. 4.3e-13;
  Matches   51;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2890 AGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
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Db      63277 AGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 63227


RESULT 30
ACN44754/c
ID   ACN44754 standard; DNA; 215221 BP.
XX
AC   ACN44754;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Human genomic sequence hCG37990.
XX
KW   Cytostatic; carcinoma; lymphoma; cancer; human; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003073826-A2.
XX
PD   12-SEP-2003.
XX
PF   28-FEB-2003; 2003WO-US006235.
XX
PR   01-MAR-2002; 2002US-00087192.
XX
PA   (SAGR-) SAGRES DISCOVERY.
XX
PI   Morris DW;
XX
DR   WPI; 2003-328604/31.
XX
PT   Recombinant nucleic acid useful for diagnosis and treatment of carcinoma
PT   comprises a nucleotide sequence.
XX
PS   Claim 1; SEQ ID NO 1360; 0pp; English.
XX
CC   The present invention relates to novel DNA and protein sequences which
CC   are associated with carcinomas. The sequences are useful for: (i) for
CC   screening drug candidates; (ii) for screening of bioactive agent capable
CC   of binding to Carcinoma Associated Protein (CAP); (iii) for screening of
CC   a bioactive agent capable of modulating the activity of CAP; (iv) for
CC   evaluating the effect of a candidate carcinoma drug; (v) for diagnosing
CC   carcinoma; (vi) for inhibiting the activity of CAP; (vii) for treating
CC   carcinoma; (viii) for neutralizing the effect of CAP; (ix) as a biochip;
CC   (x) for diagnosing carcinoma or a propensity to carcinoma; and (xi) for
CC   determining Carcinoma Associated (CA) gene copy number. In addition, the
CC   CA genes are useful as DNA vaccines and the CAP are useful as markers of
CC   carcinoma including lymphoma. The present sequence is one such CA coding
CC   sequence. Note: This patent is an equivalent to basic patent
CC   US2002182586A1, for which no sequence data was published
XX
SQ   Sequence 215221 BP; 63216 A; 39385 C; 42715 G; 69905 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 51;  DB 11;  Length 215221;
  Best Local Similarity   100.0%;  Pred. No. 4.2e-13;
  Matches   51;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 3121
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Db      50858 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 50808


RESULT 31
AAC24464/c
ID   AAC24464 standard; cDNA; 255 BP.
XX
AC   AAC24464;
XX
DT   06-OCT-2000  (first entry)
XX
DE   Human secreted protein 5' EST, SEQ ID NO: 28539.
XX
KW   Human; 5' EST; expressed sequence tag; secreted protein; cDNA isolation;
KW   gene therapy; chromosome mapping; ss.
XX
OS   Homo sapiens.
XX
PN   EP1033401-A2.
XX
PD   06-SEP-2000.
XX
PF   21-FEB-2000; 2000EP-00200610.
XX
PR   26-FEB-1999;   99US-0122487P.
XX
PA   (GEST ) GENSET.
XX
PI   Dumas Milne Edwards J,  Duclert A,  Giordano J;
XX
DR   WPI; 2000-500381/45.
XX
PT   New nucleic acid that is a 5' expressed sequence tag (5' EST) for
PT   obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for
```

PT diagnostic, forensic, gene therapy and chromosome mapping procedures.
XX
PS Claim 1; SEQ ID NO 28539; 71pp + Sequence Listing; English.
XX
CC The present sequence is one of a large number of 5' ESTs derived from
CC mRNAs encoding secreted proteins. No ORF has yet been conclusively
CC identified within the present sequence. The 5' ESTs were prepared from
CC total human RNAs or polyA+ RNAs derived from 30 different tissues. EST
CC sequences usually correspond mainly to the 3' untranslated region (UTR)
CC of the mRNA because they are often obtained from oligo-dT primed cDNA
CC libraries. Such ESTs are not well suited for isolating cDNA sequences
CC derived from the 5' ends of mRNAs and even in those cases where longer
CC cDNA sequences have been obtained, the full 5' UTR is rarely included. 5'
CC ESTs are derived from mRNAs with intact 5' ends and can therefore be used
CC to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in
CC diagnostic, forensic, gene therapy and chromosome mapping procedures.
CC They are used to obtain upstream regulatory sequences and to design
CC expression and secretion vectors
XX
SQ Sequence 255 BP; 47 A; 55 C; 53 G; 100 T; 0 U; 0 Other;

Query Match 1.6%; Score 50; DB 3; Length 255;
Best Local Similarity 100.0%; Pred. No. 1.6e-12;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db 226 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 177

RESULT 32
ADN41748
ID ADN41748 standard; DNA; 288 BP.
XX
AC ADN41748;
XX
DT 17-JUN-2004 (first entry)
XX
DE Novel human secreted protein polynucleotide seqid 870.
XX
KW immunomodulator; immunosuppressive; antiinflammatory; dermatological;
KW antiarthritic; antirheumatic; neuroprotective; antianaemic; muscular;
KW antiallergic; antiasthmatic; gastrointestinal; anticoagulant;
KW thrombolytic; antiarteriosclerotic; cardiant; cytostatic; nephrotropic;
KW cardiovascular; respiratory; gene therapy; secreted protein;
KW chromosome identification; hybrid mapping; gene expression control;
KW immune system disorder; immunodeficiency; Chediak-Higashi syndrome;
KW autoimmune disease; systemic lupus erythematosus; rheumatoid arthritis;
KW multiple sclerosis; haemolytic anaemia; myasthenia gravis;
KW allergic reaction; asthma; inflammatory condition;
KW inflammatory bowel disease; B cell stimulator; T cell activator;
KW blood-related disorder; eosinophilia; thrombosis; thromboembolism;
KW atherosclerosis; myocardial infarction; angina; anaemia;
KW hyperproliferative disorder; cancer; renal disorder;
KW chronic kidney failure; renal tubular acidosis; kidney stone;
KW cardiovascular disorder; respiratory disorder; human; ds.
XX
OS Homo sapiens.
XX
PN US2004044191-A1.
XX
PD 04-MAR-2004.
XX
PF 10-OCT-2001; 2001US-00973278.
XX
PR 08-JUL-1997; 97US-0051916P.
PR 08-JUL-1997; 97US-0051918P.
PR 08-JUL-1997; 97US-0051919P.
PR 08-JUL-1997; 97US-0051920P.
PR 08-JUL-1997; 97US-0051925P.
PR 08-JUL-1997; 97US-0051926P.
PR 08-JUL-1997; 97US-0051928P.
PR 08-JUL-1997; 97US-0051929P.
PR 08-JUL-1997; 97US-0051930P.
PR 08-JUL-1997; 97US-0051931P.
PR 08-JUL-1997; 97US-0051932P.
PR 08-JUL-1997; 97US-0052732P.
PR 08-JUL-1997; 97US-0052733P.
PR 08-JUL-1997; 97US-0052793P.
PR 08-JUL-1997; 97US-0052795P.
PR 08-JUL-1997; 97US-0052803P.
PR 18-AUG-1997; 97US-0055684P.
PR 18-AUG-1997; 97US-0055722P.
PR 18-AUG-1997; 97US-0055723P.
PR 18-AUG-1997; 97US-0055947P.
PR 18-AUG-1997; 97US-0055948P.
PR 18-AUG-1997; 97US-0055949P.
PR 18-AUG-1997; 97US-0055950P.
PR 18-AUG-1997; 97US-0055953P.
PR 18-AUG-1997; 97US-0055954P.
PR 18-AUG-1997; 97US-0055964P.
PR 18-AUG-1997; 97US-0055984P.
PR 18-AUG-1997; 97US-0056360P.
PR 12-SEP-1997; 97US-0058660P.
PR 12-SEP-1997; 97US-0058661P.
PR 12-SEP-1997; 97US-0058664P.
PR 12-SEP-1997; 97US-0058785P.
PR 07-JUL-1998; 98WO-US013684.
PR 08-JAN-1999; 99US-00227357.
PR 13-OCT-2000; 2000US-0239899P.
XX
PA (FISC/) FISCHER C L.
PA (ROSE/) ROSEN C A.
PA (SOPP/) SOPPET D R.
PA (RUBE/) RUBEN S M.
PA (KYAW/) KYAW H.
PA (LIYY/) LI Y.
PA (ZENG/) ZENG Z.
PA (LAFL/) LAFLEUR D W.
PA (MOOR/) MOORE P A.
PA (SHIY/) SHI Y.
PA (OLSE/) OLSEN H.
PA (EBNE/) EBNER R.
PA (BIRS/) BIRSE C E.
XX
PI Fischer CL, Rosen CA, Soppet DR, Ruben SM, Kyaw H, Li Y, Zeng Z;
PI Lafleur DW, Moore PA, Shi Y, Olsen H, Ebner R, Birse CE;
XX
DR WPI; 2004-225733/21.
XX
PT New isolated nucleic acid encoding human proteins, useful for treating,
PT preventing or diagnosing e.g. rheumatoid arthritis, multiple sclerosis,
PT anemia, inflammatory bowel disease, atherosclerosis, cancers, chronic
PT kidney failure.
XX
PS Disclosure; SEQ ID NO 870; 372pp; English.
XX
CC The invention describes novel human secreted proteins and the nucleotides
CC encoding them. The polynucleotides are useful in chromosome
CC identification, for radiation hybrid mapping, in controlling gene
CC expression, in gene therapy or as molecular weight markers. The
CC polynucleotides and polypeptides are useful for diagnosing, treating or
CC preventing diseases of the immune system, immunodeficiencies, e.g.
CC Chediak-Higashi syndrome, autoimmune diseases, e.g. systemic lupus
CC erythematosus, rheumatoid arthritis, multiple sclerosis, haemolytic
CC anaemia or myasthenia gravis, allergic reactions, e.g. asthma,
CC inflammatory conditions, e.g. inflammatory bowel disease. They can also
CC be used as a stimulator of B cell responsiveness to pathogens or as an
CC activator of T cells. The polynucleotides and polypeptides are also
CC useful for treating or preventing blood-related disorders, e.g.
CC eosinophilia, thrombosis, thromboembolism, atherosclerosis, myocardial
CC infarction, unstable angina or anaemia. They can also be used for
CC treating, preventing or diagnosing hyperproliferative disorders
CC (cancers), renal disorders (chronic kidney failure, renal tubular
CC acidosis or kidney stones), cardiovascular disorders or respiratory
CC disorders. This sequence represents a novel human secreted protein

```
CC   polynucleotide fragment. Note: This sequence is available in electronic
CC   format from the US patent office at
CC   ftp.seqdata.uspto.gov/sequence.html?DocID=20040044191.
XX
SQ   Sequence 288 BP; 89 A; 75 C; 80 G; 44 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 50;  DB 12;  Length 288;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db        221 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 270


RESULT 33
AAK84092
ID   AAK84092 standard; DNA; 301 BP.
XX
AC   AAK84092;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:38904.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
PR   16-MAR-2000; 2000US-0189874P.
PR   17-MAR-2000; 2000US-0190076P.
PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
PR   14-JUL-2000; 2000US-0218290P.
PR   26-JUL-2000; 2000US-0220963P.
PR   26-JUL-2000; 2000US-0220964P.
PR   14-AUG-2000; 2000US-0224518P.
PR   14-AUG-2000; 2000US-0224519P.
PR   14-AUG-2000; 2000US-0225213P.
PR   14-AUG-2000; 2000US-0225214P.
PR   14-AUG-2000; 2000US-0225266P.
PR   14-AUG-2000; 2000US-0225267P.
PR   14-AUG-2000; 2000US-0225268P.
PR   14-AUG-2000; 2000US-0225270P.
PR   14-AUG-2000; 2000US-0225447P.
PR   14-AUG-2000; 2000US-0225757P.
PR   14-AUG-2000; 2000US-0225758P.
PR   14-AUG-2000; 2000US-0225759P.
PR   18-AUG-2000; 2000US-0226279P.
PR   22-AUG-2000; 2000US-0226681P.
PR   22-AUG-2000; 2000US-0226868P.
PR   22-AUG-2000; 2000US-0227182P.
PR   23-AUG-2000; 2000US-0227009P.
PR   30-AUG-2000; 2000US-0228924P.
PR   01-SEP-2000; 2000US-0229287P.
PR   01-SEP-2000; 2000US-0229343P.
PR   01-SEP-2000; 2000US-0229344P.
PR   01-SEP-2000; 2000US-0229345P.
PR   05-SEP-2000; 2000US-0229509P.
PR   05-SEP-2000; 2000US-0229513P.
PR   06-SEP-2000; 2000US-0230437P.
PR   06-SEP-2000; 2000US-0230438P.
PR   08-SEP-2000; 2000US-0231242P.
PR   08-SEP-2000; 2000US-0231243P.
PR   08-SEP-2000; 2000US-0231244P.
PR   08-SEP-2000; 2000US-0231413P.
PR   08-SEP-2000; 2000US-0231414P.
PR   08-SEP-2000; 2000US-0232080P.
PR   08-SEP-2000; 2000US-0232081P.
PR   12-SEP-2000; 2000US-0231968P.
PR   14-SEP-2000; 2000US-0232397P.
PR   14-SEP-2000; 2000US-0232398P.
PR   14-SEP-2000; 2000US-0232399P.
PR   14-SEP-2000; 2000US-0232400P.
PR   14-SEP-2000; 2000US-0232401P.
PR   14-SEP-2000; 2000US-0233063P.
PR   14-SEP-2000; 2000US-0233064P.
PR   14-SEP-2000; 2000US-0233065P.
PR   21-SEP-2000; 2000US-0234223P.
PR   21-SEP-2000; 2000US-0234274P.
PR   25-SEP-2000; 2000US-0234997P.
PR   25-SEP-2000; 2000US-0234998P.
PR   26-SEP-2000; 2000US-0235484P.
PR   27-SEP-2000; 2000US-0235834P.
PR   27-SEP-2000; 2000US-0235836P.
PR   29-SEP-2000; 2000US-0236327P.
PR   29-SEP-2000; 2000US-0236367P.
PR   29-SEP-2000; 2000US-0236368P.
PR   29-SEP-2000; 2000US-0236369P.
PR   29-SEP-2000; 2000US-0236370P.
PR   02-OCT-2000; 2000US-0236802P.
PR   02-OCT-2000; 2000US-0237037P.
PR   02-OCT-2000; 2000US-0237038P.
PR   02-OCT-2000; 2000US-0237039P.
PR   02-OCT-2000; 2000US-0237040P.
PR   13-OCT-2000; 2000US-0239935P.
PR   13-OCT-2000; 2000US-0239937P.
PR   20-OCT-2000; 2000US-0240960P.
PR   20-OCT-2000; 2000US-0241221P.
PR   20-OCT-2000; 2000US-0241785P.
PR   20-OCT-2000; 2000US-0241786P.
PR   20-OCT-2000; 2000US-0241787P.
PR   20-OCT-2000; 2000US-0241808P.
PR   20-OCT-2000; 2000US-0241809P.
PR   20-OCT-2000; 2000US-0241826P.
PR   01-NOV-2000; 2000US-0244617P.
PR   08-NOV-2000; 2000US-0246474P.
PR   08-NOV-2000; 2000US-0246475P.
PR   08-NOV-2000; 2000US-0246476P.
PR   08-NOV-2000; 2000US-0246477P.
PR   08-NOV-2000; 2000US-0246478P.
PR   08-NOV-2000; 2000US-0246523P.
PR   08-NOV-2000; 2000US-0246524P.
PR   08-NOV-2000; 2000US-0246525P.
PR   08-NOV-2000; 2000US-0246526P.
PR   08-NOV-2000; 2000US-0246527P.
PR   08-NOV-2000; 2000US-0246528P.
PR   08-NOV-2000; 2000US-0246532P.
PR   08-NOV-2000; 2000US-0246609P.
PR   08-NOV-2000; 2000US-0246610P.
PR   08-NOV-2000; 2000US-0246611P.
PR   08-NOV-2000; 2000US-0246613P.
PR   17-NOV-2000; 2000US-0249207P.
PR   17-NOV-2000; 2000US-0249208P.
PR   17-NOV-2000; 2000US-0249209P.
PR   17-NOV-2000; 2000US-0249210P.
PR   17-NOV-2000; 2000US-0249211P.
PR   17-NOV-2000; 2000US-0249212P.
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PR   17-NOV-2000; 2000US-0249213P.
PR   17-NOV-2000; 2000US-0249214P.
PR   17-NOV-2000; 2000US-0249215P.
PR   17-NOV-2000; 2000US-0249216P.
PR   17-NOV-2000; 2000US-0249217P.
PR   17-NOV-2000; 2000US-0249218P.
PR   17-NOV-2000; 2000US-0249244P.
PR   17-NOV-2000; 2000US-0249245P.
PR   17-NOV-2000; 2000US-0249264P.
PR   17-NOV-2000; 2000US-0249265P.
PR   17-NOV-2000; 2000US-0249297P.
PR   17-NOV-2000; 2000US-0249299P.
PR   17-NOV-2000; 2000US-0249300P.
PR   01-DEC-2000; 2000US-0250160P.
PR   01-DEC-2000; 2000US-0250391P.
PR   05-DEC-2000; 2000US-0251030P.
PR   05-DEC-2000; 2000US-0251988P.
PR   05-DEC-2000; 2000US-0256719P.
PR   06-DEC-2000; 2000US-0251479P.
PR   08-DEC-2000; 2000US-0251856P.
PR   08-DEC-2000; 2000US-0251868P.
PR   08-DEC-2000; 2000US-0251869P.
PR   08-DEC-2000; 2000US-0251989P.
PR   08-DEC-2000; 2000US-0251990P.
PR   11-DEC-2000; 2000US-0254097P.
PR   05-JAN-2001; 2001US-0259678P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-483426/52.
XX
PT   Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS   Disclosure; SEQ ID NO 38904; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting the
CC   nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 301 BP; 87 A; 74 C; 92 G; 48 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 50;  DB 4;  Length 301;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        234 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 283


RESULT 34
AAS93725
ID   AAS93725 standard; cDNA; 432 BP.
XX
AC   AAS93725;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #29529.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US008631.
XX
PR   31-MAR-2000; 2000US-00540217.
PR   23-AUG-2000; 2000US-00649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG29538.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity.
XX
PS   Claim 1; SEQ ID NO 29529; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC   sequences. (I) is useful as hybridisation probes, polymerase chain
CC   reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC   and in recombinant production of (II). The polynucleotides are also used
CC   in diagnostics as expressed sequence tags for identifying expressed
CC   genes. (I) is useful in gene therapy techniques to restore normal
CC   activity of (II) or to treat disease states involving (II). (II) is
CC   useful for generating antibodies against it, detecting or quantitating a
CC   polypeptide in tissue, as molecular weight markers and as a food
CC   supplement. (II) and its binding partners are useful in medical imaging
CC   of sites expressing (II). (I) and (II) are useful for treating disorders
CC   involving aberrant protein expression or biological activity. The
CC   polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic
CC   coding sequences of the invention. Note: The sequence data for this
CC   patent did not appear in the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 432 BP; 57 A; 142 C; 168 G; 65 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 50;  DB 5;  Length 432;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        888 GACGGGCTCAACAAGACGACTGCGTGCTACCACCACCTGGTGCTGACCGT 937
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db         22 GACGGGCTCAACAAGACGACTGCGTGCTACCACCACCTGGTGCTGACCGT 71


RESULT 35
ADQ81170
ID   ADQ81170 standard; DNA; 1001 BP.
XX
AC   ADQ81170;
XX
DT   04-NOV-2004  (first entry)
XX
```

```
DE   Human phenotype associated polynucleotide baySNP59113 SEQ ID NO:258.
XX
KW   ds; gene; phenotype associated; PA; cardiant; statin; cardiovascular;
KW   atherosclerosis; ischaemia; reperfusion; hypertension; restenosis;
KW   arterial inflammation; myocardial infarction; stroke;
KW   single nucleotide polymorphism; SNP.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   variation       501
FT                   /*tag=  a
FT                   /standard_name= "Single nucleotide polymorphism"
XX
PN   WO2004067774-A2.
XX
PD   12-AUG-2004.
XX
PF   23-JAN-2004; 2004WO-EP000539.
XX
PR   31-JAN-2003; 2003EP-00002212.
PR   03-FEB-2003; 2003EP-00002153.
XX
PA   (FARB ) BAYER HEALTHCARE AG.
XX
PI   Stropp U,  Schwers S,  Kallabis H;
XX
DR   WPI; 2004-581012/56.
XX
PT   New polymorphisms of a phenotype associated (PA) gene, useful for
PT   assessing the response to lipid lowering drug therapy and adverse drug
PT   reactions of the medicaments, and for screening compounds for treating
PT   cardiovascular diseases.
XX
PS   Claim 1; SEQ ID NO 258; 349pp; English.
XX
CC   The invention relates to a novel polynucleotide encoded by a phenotype
CC   associated (PA) gene. The polynucleotide is selected from 292 sequences
CC   comprising 301-1002 base pairs (ADQ80913-ADQ81204) given in the
CC   specification, with allelic variation contained in a functional
CC   surrounding like full length cDNA for PA gene polypeptide and with or
CC   without the PA gene promoter sequence. A polynucleotide of the invention
CC   has cardiant activity, and acts as a phenotype-associated gene modulator.
CC   The reagent of the invention is useful for preparing a medicament. The
CC   method of the invention is useful for preparing a medicament tailored to
CC   suit a patient's individual response to statin therapy. The genetic
CC   polymorphisms are useful for assessing the response to lipid lowering
CC   drug therapy and adverse drug reactions of the medicaments, particularly
CC   for assessing cardiovascular risks in humans e.g. atherosclerosis,
CC   ischaemia/reperfusion, hypertension, restenosis, arterial inflammation,
CC   myocardial infarction, and stroke. The genetic polymorphisms are also
CC   useful for identifying compounds for treatments of cardiovascular disease
CC   above or as prophylactic therapy for cardiovascular diseases. The genetic
CC   variations are useful for predicting personal medication schemes omitting
CC   adverse drug reactions and allowing an adjustment of the drug dose to
CC   achieve maximum benefit for the patient. The nucleic acids are useful as
CC   probes for the detection of genetic polymorphisms and as templates for
CC   the recombinant production of normal variant peptides or polypeptides
CC   encoded by the genes. The present sequence represents a polynucleotide of
CC   the invention.
XX
SQ   Sequence 1001 BP; 363 A; 150 C; 269 G; 218 T; 0 U; 1 Other;

  Query Match             1.6%;  Score 50;  DB 13;  Length 1001;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        731 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 780


RESULT 36
ABS58182
ID   ABS58182 standard; cDNA; 2407 BP.
XX
AC   ABS58182;
XX
DT   26-FEB-2003  (first entry)
XX
DE   cDNA encoding human zinc finger protein 10.01.
XX
KW   Human; zinc finger protein 10.01; malignant tumour; haemopathy;
KW   human immunodeficiency virus infection; HIV infection; inflammation;
KW   immunological disease; gene; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             1279. .1554
FT                   /*tag=  a
FT                   /product= "Zinc finger protein 10.01"
XX
PN   CN1352110-A.
XX
PD   05-JUN-2002.
XX
PF   06-NOV-2000; 2000CN-00127241.
XX
PR   06-NOV-2000; 2000CN-00127241.
XX
PA   (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
PI   Mao Y,  Xie Y;
XX
DR   WPI; 2002-692406/75.
DR   P-PSDB; ABG72222.
XX
PT   New human zinc finger protein 10.01 polypeptide for treating malignant
PT   tumors, hemopathy, human immunodeficiency virus infection, immunological
PT   diseases and various inflammations.
XX
PS   Claim 6; Page 25-26 (disclosure); 33pp; Chinese.
XX
CC   The present invention relates to the isolation of human zinc finger
CC   protein 10.01, and the polynucleotide sequence encoding it. Also
CC   described is the process for preparing the protein by DNA recombination
CC   and the application of the polypeptide and polynucleotide in treating
CC   various diseases such as malignant tumours, haemopathy, human
CC   immunodeficiency virus (HIV) infection, immunological diseases, and
CC   various inflammations. The present sequence encodes human zinc finger
CC   protein 10.01
XX
SQ   Sequence 2407 BP; 746 A; 458 C; 570 G; 633 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 50;  DB 6;  Length 2407;
  Best Local Similarity   100.0%;  Pred. No. 1.4e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        225 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 274


RESULT 37
ABA82624
ID   ABA82624 standard; DNA; 8705 BP.
XX
AC   ABA82624;
XX
DT   25-JAN-2002  (first entry)
XX
DE   Human HBM gene region b200e21-h_contig1.
XX
KW   Human; high bone mass; HBM gene; Zmax1 gene; chromosome 11; 11q13.3;
KW   sequence tagged site; STS; osteoporosis; osteopathic; gene therapy;
```

KW antisense therapy; vaccine; bone disorder; Paget's disease; sclerostosis;
KW osteomalacia; fibrous dysplasia; ds.
XX
OS Homo sapiens.
XX
PN WO200177327-A1.
XX
PD 18-OCT-2001.
XX
PF 21-JUN-2000; 2000WO-US016951.
XX
PR 05-APR-2000; 2000US-00543771.
PR 05-APR-2000; 2000US-00544398.
XX
PA (GENO-) GENOME THERAPEUTICS CORP.
XX
PI Carulli JP, Little RD, Recker RR, Johnson ML;
XX
DR WPI; 2001-657171/75.
XX
PT New high bone mass (HBM) and Zmax1 genes and proteins useful for
PT modulating bone mass for the treatment of e.g. osteoporosis.
XX
PS Claim 51; Page 303-308; 443pp; English.
XX
CC The present invention describes the human Zmax1 gene and the high bone
CC mass (HBM) gene,which are found on chromosome 11q13.3. The Zmax1 and HBM
CC genes have osteopathic activities. The genes can be used in gene therapy,
CC antisense therapy and in the production of vaccines. They can be used in
CC the diagnosis and treatment of bone disorders including osteoporosis,
CC Paget's disease, sclerostosis, osteomalacia and fibrous dysplasia.
CC ABA82038 to ABA82700 and AAG68168 to AAG68193 represent sequences used in
CC the exemplification of the present invention
XX
SQ Sequence 8705 BP; 2107 A; 2317 C; 2399 G; 1882 T; 0 U; 0 Other;

Query Match 1.6%; Score 50; DB 5; Length 8705;
Best Local Similarity 100.0%; Pred. No. 1.4e-12;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
||||||||||||||||||||||||||||||||||||||||||||||||||
Db 6492 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 6541

RESULT 38
ACC45365
ID ACC45365 standard; DNA; 8705 BP.
XX
AC ACC45365;
XX
DT 02-JUN-2003 (first entry)
XX
DE Human HBM gene fragment #6.
XX
KW Human; high bone mass; HBM; LRP5; LRP6; transgenic; bone mass modulation;
KW gene therapy; bone density modulation; bone strength; trabecular number;
KW bone size; bone tissue connectivity; bone disease; osteoporosis;
KW osteomalacia; rickets; Paget's disease; neoplasm of the bone; gene; ds.
XX
OS Homo sapiens.
XX
PN WO200292764-A2.
XX
PD 21-NOV-2002.
XX
PF 13-MAY-2002; 2002WO-US014876.
XX
PR 11-MAY-2001; 2001US-0290071P.
PR 17-MAY-2001; 2001US-0291311P.
PR 01-FEB-2002; 2002US-0353058P.
PR 04-MAR-2002; 2002US-0361293P.
XX
PA (GENO-) GENOME THERAPEUTICS CORP.
PA (AMHP) WYETH.
XX
PI Babij P, Bex FJ, Yaworsky PJ, Bodine PV;
XX
DR WPI; 2003-129278/12.
XX
PT New transgenic animals (e.g. mice), useful as models for studying bone
PT density modulation, developing drugs for treating or preventing bone
PT diseases (e.g. osteoporosis), or diagnosing diseases characterized by
PT reduced bone density.
XX
PS Example 2; Page 358-361; 603pp; English.
XX
CC The invention relates to novel transgenic animals expressing the high
CC bone mass (HBM) gene, expressing the corresponding wild type HBM gene,
CC comprising an alteration of the gene encoding LRP5 or LRP6, or expressing
CC an LRP5 that is modulated by an altered gene control sequence introduced
CC by homologous or non-homologous recombination. The transgenic animals are
CC for the study of bone density modulation or bone mass modulation. The
CC invention has osteopathic and cytostatic activity. The polynucleotides of
CC the invention may have a use in gene therapy. The transgenic animals and
CC nucleic acids are for the study of bone density modulation, where the
CC bone mass is modulated relative to non-transgenic animals of the same
CC species in more than one parameter selected from bone density, bone
CC strength, trabecular number, bone size, or bone tissue connectivity. The
CC transgenic animals, nucleic acids and methods are useful for identifying
CC molecules involved in bone development, and for developing pharmaceutical
CC compositions, which may be employed for treating or preventing bone
CC diseases, e.g. osteoporosis, osteomalacia, rickets, Paget's disease, or
CC neoplasms of the bone. The transgenic animals and nucleic acids are also
CC useful in methods for diagnosing diseases involved in bone development,
CC or characterised by reduced bone density or mass. The present sequence is
CC used in the exemplification of the invention
XX
SQ Sequence 8705 BP; 2107 A; 2317 C; 2399 G; 1882 T; 0 U; 0 Other;

Query Match 1.6%; Score 50; DB 8; Length 8705;
Best Local Similarity 100.0%; Pred. No. 1.4e-12;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
||||||||||||||||||||||||||||||||||||||||||||||||||
Db 6492 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 6541

RESULT 39
ADB98065
ID ADB98065 standard; DNA; 8705 BP.
XX
AC ADB98065;
XX
DT 04-DEC-2003 (first entry)
XX
DE HBM-related clone contig b200e21-h contig1.
XX
KW Osteopathic; Gene therapy; High Bone Mass; HBM; LRP5; Zmax1; LRP6;
KW bone mass modulation; osteoporosis; human; ds.
XX
OS Homo sapiens.
XX
PN WO200292000-A2.
XX
PD 21-NOV-2002.
XX
PF 13-MAY-2002; 2002WO-US014877.
XX
PR 11-MAY-2001; 2001US-0290071P.
PR 17-MAY-2001; 2001US-0291311P.
PR 01-FEB-2002; 2002US-0353058P.
PR 04-MAR-2002; 2002US-0361293P.
XX
PA (GENO-) GENOME THERAPEUTICS CORP.

```
PA   (AMHP ) WYETH.
XX
PI   Allen K,  Anisowicz A,  Graham JR,  Morales A,  Yaworsky PJ,  Liu W;
XX
DR   WPI; 2003-129214/12.
XX
PT   New nucleic acid comprising a mutation in LRP5 or LRP6, useful for
PT   diagnosing a HBM-like phenotype in a subject and for preparing a
PT   composition for modulating bone mass and/or lipid levels in a subject
PT   suffering from e.g. osteoporosis.
XX
PS   Example 3; SEQ ID NO 10; 629pp; English.
XX
CC   The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and
CC   LRP6 mutants, which results in a HBM-like phenotype when expressed in a
CC   cell. The HBM-like phenotype results in bone mass modulation and/or lipid
CC   level modulation. The invention is useful for diagnosing a HBM-like
CC   phenotype in a subject and for preparing a composition for modulating
CC   bone mass and/or lipid levels in a subject suffering from e.g.
CC   osteoporosis. The present sequence was used to illustrate the invention.
XX
SQ   Sequence 8705 BP; 2107 A; 2317 C; 2399 G; 1882 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 50;  DB 10;  Length 8705;
  Best Local Similarity   100.0%;  Pred. No. 1.4e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             ||||||||||||||||||||||||||||||||||||||||||||||||||
Db       6492 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 6541


RESULT 40
ADE82434
ID   ADE82434 standard; DNA; 8705 BP.
XX
AC   ADE82434;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human DNA sequence related to the invention #6.
XX
KW   LRP5; LRP6; HBM; Dkk activity; Osteopathic; Antiinflammatory;
KW   Antiarthritic; bone mass disorders; osteoporosis; hypercalcaemia;
KW   hyperostosis; osteogenesis; Wnt signaling; ds.
XX
OS   Homo sapiens.
XX
PN   WO200292015-A2.
XX
PD   21-NOV-2002.
XX
PF   17-MAY-2002; 2002WO-US015982.
XX
PR   17-MAY-2001; 2001US-0291311P.
PR   01-FEB-2002; 2002US-0353058P.
PR   04-MAR-2002; 2002US-0361293P.
XX
PA   (GENO-) GENOME THERAPEUTICS CORP.
PA   (AMHP ) WYETH.
XX
PI   Allen K,  Anisowicz A,  Bhat BM,  Damagnez V,  Robinson JA;
PI   Yaworsky PJ;
XX
DR   WPI; 2003-129219/12.
XX
PT   Regulating LRP5, LRP6 or HBM activity in a subject, useful for modulating
PT   lipid levels and/or bone mass, and for in treating bone mass disorders,
PT   e.g. osteoporosis, comprises administering a composition which modulates
PT   a Dkk activity.
XX
PS   Disclosure; SEQ ID NO 10; 173pp; English.
XX
CC   The present invention relates to regulating LRP5, LRP6 or HBM activity in
CC   a subject comprising administering a composition which modulates a Dkk
CC   activity. The method is useful for modulating lipid levels and/or bone
CC   mass, and is useful in treating or diagnosing abnormal lipid levels and
CC   bone mass disorders, such as osteoporosis, bond fracture, age-related
CC   loss of bone, a chondrodystrophy, drug-induced bone disorder, high bone
CC   turnover, hypercalcaemia, hyperostosis, osteogenesis, imperfecta,
CC   osteomalacia, osteomyelitis, Paget's disease, osteoarthritis, and
CC   rickets. Modulators of Dkk activity are useful for as reagents in
CC   studying bone mass and lipid level modulation, in modulating Wnt
CC   signaling, or treating Dkk-mediated disorders. The present sequence
CC   represents a human DNA sequence related to the invention.
XX
SQ   Sequence 8705 BP; 2107 A; 2317 C; 2399 G; 1882 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 50;  DB 10;  Length 8705;
  Best Local Similarity   100.0%;  Pred. No. 1.4e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             ||||||||||||||||||||||||||||||||||||||||||||||||||
Db       6492 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 6541


RESULT 41
ADR16928
ID   ADR16928 standard; DNA; 8705 BP.
XX
AC   ADR16928;
XX
DT   04-NOV-2004  (first entry)
XX
DE   BAC clone containing segments of the human Zmax1 gene #6.
XX
KW   Human; high bone mass; Zmax1; ds; BAC; HBM; osteoporosis;
KW   chromosome 11q13.3; osteopathic; LDL receptor; bone development;
KW   metabolic bone disease; bacterial artificial chromosome.
XX
OS   Homo sapiens.
XX
PN   US6780609-B1.
XX
PD   24-AUG-2004.
XX
PF   05-APR-2000; 2000US-00543771.
XX
PR   13-JAN-1998;   98US-0071449P.
PR   23-OCT-1998;   98US-0105511P.
PR   13-JAN-1999;   99US-00229319.
XX
PA   (GENO-) GENOME THERAPEUTICS CORP.
XX
PI   Carulli JP,  Little RD,  Recker RR,  Johnson ML;
XX
DR   WPI; 2004-623529/60.
XX
PT   New high bone mass gene of chromosome 1.1Q13.3, encoding protein useful
PT   for treating, diagnosing, preventing, or screening for normal and
PT   abnormal conditions of bone, including metabolic bone diseases, e.g.
PT   osteoporosis.
XX
PS   Example 2; SEQ ID NO 10; 284pp; English.
XX
CC   The invention relates to an isolated amino acid protein sequence selected
CC   from an amino acid sequence appearing as ADR16922 or an amino acid
CC   sequence comprising or consisting of the extracellular domain of
CC   ADR16922(amino acids 23-1385). ADR16922 is encoded by the HBM (high bone
CC   mass) allele of the human Zmax1 gene and has sequence similarity to LDL
CC   receptors. Also disclosed are nucleic acids, proteins, cloning vectors,
CC   expression vectors, transformed hosts, methods of developing
CC   pharmaceutical compositions, methods of identifying molecules involved in
CC   bone development, and methods of diagnosing and treating diseases
CC   involved in bone development. Specifically disclosed is the Zmax1 gene
```

```
CC   and the high bone mass (HBM) allele on chromosome 11q13.3 encoding
CC   ADR16922. The protein is useful for treating, diagnosing, preventing, or
CC   screening for normal and abnormal conditions of bone, including metabolic
CC   bone diseases, e.g. osteoporosis. The present sequence is a BAC
CC   (bacterial artificial chromosome) containing part of the Zmax1 gene.
XX
SQ   Sequence 8705 BP; 2107 A; 2317 C; 2399 G; 1882 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 50;  DB 13;  Length 8705;
  Best Local Similarity   100.0%;  Pred. No. 1.4e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             ||||||||||||||||||||||||||||||||||||||||||||||||||
Db       6492 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 6541


RESULT 42
ADR47579
ID   ADR47579 standard; DNA; 8705 BP.
XX
AC   ADR47579;
XX
DT   02-DEC-2004  (first entry)
XX
DE   BAC clone containing segments of the human Zmax1 gene #6.
XX
KW   Human; ds; bacterial artificial chromosome; high bone mass; Zmax1; HBM;
KW   bone modulation; bone development disorder; osteoporosis;
KW   chromosome 11q13.3; gene therapy; BAC.
XX
OS   Homo sapiens.
XX
PN   US2004176582-A1.
XX
PD   09-SEP-2004.
XX
PF   10-DEC-2003; 2003US-00731739.
XX
PR   13-JAN-1998;   98US-0071449P.
PR   23-OCT-1998;   98US-0105511P.
PR   13-JAN-1999;   99US-00229319.
PR   05-APR-2000; 2000US-00544398.
XX
PA   (GENO-) GENOME THERAPEUTICS CORP.
PA   (UYCR-) UNIV CREIGHTON.
XX
PI   Carulli JP,  Little RD,  Recker RR,  Johnson ML;
XX
DR   WPI; 2004-661408/64.
XX
PT   New nucleic acid sequence encoding high bone mass, useful in diagnosing,
PT   treating and/or preventing osteoporosis.
XX
PS   Claim 51; SEQ ID NO 10; 303pp; English.
XX
CC   The invention relates to an isolated nucleic acid sequence encoding a
CC   high bone mass protein (HBM). The gene exists in two alleles, Zmax1, the
CC   notional wild-type (the cDNA for which appears as ADR47570 encoding
CC   ADR47572) and the HBM allele (the cDNA for which appears as ADR47571
CC   encoding ADR47573). The two alleles differ by a single nucleotide
CC   polymorphism (G to T at position 582 of ADR47570) causing a Gly to Val
CC   change at position 171 of the protein. Also included are a replicative
CC   cloning vector comprising HBM/Zmax1 (and a replicon operative in an
CC   isolated host cell), an expression vector comprising HBM/Zmax1 operably
CC   linked to a transcription regulatory region, an isolated host cell
CC   transformed with the vector(s), a method for testing a substance as a
CC   therapeutic agent for bone modulation in a host, a method of identifying
CC   a molecule involved in bone modulation, a method for identifying a
CC   (candidate) protein involved in bone modulation,a method of testing for
CC   HBM activity, a method of developing a pharmaceutical for the treatment
CC   of bone development disorders, a method for treating a bone development
CC   disorder in an animal, a method of altering bone development in a host, a
CC   method for diagnostic screening for a genetic predisposition to a bone
CC   development disorder, a diagnostic assay for bone development disorders,
CC   a method of expressing the HBM protein in bone tissue, a bacterial
CC   artificial chromosome comprising HBM/Zmax1 sequence (appearing as
CC   ADR47574-ADR47580), a method for amplifying a nucleotide polymorphism in
CC   the Zmax1 or HBM gene, a method for identifying a regulatory element of a
CC   HBM gene and an isolated nucleic acid segment of at least 15 contiguous
CC   nucleotides including a polymorphic site from HBM/Zmax1. The nucleic acid
CC   molecule and the encoded polypeptide, composition, and methods are useful
CC   in diagnosing, treating and preventing a bone development disorder, i.e.
CC   osteoporosis. The gene for HBM/Zmax1 is located on chromosome 11q13.3.
CC   The present sequence is an HBM DNA from a bacterial artificial
CC   chromosome.
XX
SQ   Sequence 8705 BP; 2107 A; 2317 C; 2399 G; 1882 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 50;  DB 13;  Length 8705;
  Best Local Similarity   100.0%;  Pred. No. 1.4e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             ||||||||||||||||||||||||||||||||||||||||||||||||||
Db       6492 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 6541


RESULT 43
AEB69308
ID   AEB69308 standard; DNA; 8705 BP.
XX
AC   AEB69308;
XX
DT   22-SEP-2005  (first entry)
XX
DE   Human High Bone Mass gene related contig b200e21-h_contig1, SEQ ID 10.
XX
KW   Osteopathic; high bone mass; Zmax1; bone disease; osteoporosis;
KW   osteomalacia; bone injury; Pagets disease; ds.
XX
OS   Homo sapiens.
XX
PN   US2005142617-A1.
XX
PD   30-JUN-2005.
XX
PF   29-APR-2004; 2004US-00834377.
XX
PR   13-JAN-1998;   98US-0071449P.
PR   23-OCT-1998;   98US-0105511P.
PR   13-JAN-1999;   99US-00229319.
PR   05-APR-2000; 2000US-00543771.
XX
PA   (GENO-) GENOME THERAPEUTICS CORP.
PA   (UYCR-) UNIV CREIGHTON SCHOOL MEDICINE.
XX
PI   Carulli JP,  Little RD,  Recker RR,  Johnson ML;
XX
DR   WPI; 2005-496364/50.
XX
PT   Identifying candidate molecule involved in bone modulation, comprises
PT   identifying molecule that binds to Zmax1, high bone mass (HBM) protein,
PT   or both Zmax1 and HBM protein.
XX
PS   Example 2; SEQ ID NO 10; 308pp; English.
XX
CC   The present invention relates to a method (M1) for identifying a
CC   candidate molecule involved in bone modulation. The method comprises
CC   identifying a molecule that binds to High Bone Mass protein (HBM) and/ or
CC   Zmax1 protein. The HBM gene exists in two alleles: Zmax1, the notional
CC   wild-type (the cDNA for which appears as AEB69299 encoding AEB69301 and
CC   AEB69939 encoding AEB69940) and the HBM allele (the cDNA for which
CC   appears as AEB69300 encoding AEB69302). The two alleles differ by a
CC   single nucleotide polymorphism (T to G at position 582 of AEB69299)
CC   causing a Gly to Val change at position 171 of the protein. The HBM
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CC   protein has the property of causing elevated bone mass, while the Zmax1
CC   protein does not. The gene for HBM/Zmax1 is located on chromosome
CC   11q13.3. Also claimed is a method of pharmaceutical development for
CC   treating of bone development disorders, such as osteoporosis,
CC   osteomalacia, bone fractures, Paget's disease, etc., which comprises
CC   identifying a molecule that binds to the Zmax1 protein, or to HBM, or
CC   both. The present sequence was used to illustrate the invention.
XX
SQ   Sequence 8705 BP; 2107 A; 2317 C; 2399 G; 1882 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 50;  DB 14;  Length 8705;
  Best Local Similarity   100.0%;  Pred. No. 1.4e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db       6492 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 6541


RESULT 44
AAK86119
ID   AAK86119 standard; DNA; 10396 BP.
XX
AC   AAK86119;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:40931.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
PR   16-MAR-2000; 2000US-0189874P.
PR   17-MAR-2000; 2000US-0190076P.
PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
PR   14-JUL-2000; 2000US-0218290P.
PR   26-JUL-2000; 2000US-0220963P.
PR   26-JUL-2000; 2000US-0220964P.
PR   14-AUG-2000; 2000US-0224518P.
PR   14-AUG-2000; 2000US-0224519P.
PR   14-AUG-2000; 2000US-0225213P.
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PR   14-AUG-2000; 2000US-0225266P.
PR   14-AUG-2000; 2000US-0225267P.
PR   14-AUG-2000; 2000US-0225268P.
PR   14-AUG-2000; 2000US-0225270P.
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PR   14-AUG-2000; 2000US-0225759P.
PR   18-AUG-2000; 2000US-0226279P.
PR   22-AUG-2000; 2000US-0226681P.
PR   22-AUG-2000; 2000US-0226868P.
PR   22-AUG-2000; 2000US-0227182P.
PR   23-AUG-2000; 2000US-0227009P.
PR   30-AUG-2000; 2000US-0228924P.
PR   01-SEP-2000; 2000US-0229287P.
PR   01-SEP-2000; 2000US-0229343P.
PR   01-SEP-2000; 2000US-0229344P.
PR   01-SEP-2000; 2000US-0229345P.
PR   05-SEP-2000; 2000US-0229509P.
PR   05-SEP-2000; 2000US-0229513P.
PR   06-SEP-2000; 2000US-0230437P.
PR   06-SEP-2000; 2000US-0230438P.
PR   08-SEP-2000; 2000US-0231242P.
PR   08-SEP-2000; 2000US-0231243P.
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PR   08-SEP-2000; 2000US-0231413P.
PR   08-SEP-2000; 2000US-0231414P.
PR   08-SEP-2000; 2000US-0232080P.
PR   08-SEP-2000; 2000US-0232081P.
PR   12-SEP-2000; 2000US-0231968P.
PR   14-SEP-2000; 2000US-0232397P.
PR   14-SEP-2000; 2000US-0232398P.
PR   14-SEP-2000; 2000US-0232399P.
PR   14-SEP-2000; 2000US-0232400P.
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PR   21-SEP-2000; 2000US-0234223P.
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PR   25-SEP-2000; 2000US-0234997P.
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PR   26-SEP-2000; 2000US-0235484P.
PR   27-SEP-2000; 2000US-0235834P.
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PR   29-SEP-2000; 2000US-0236327P.
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PR   29-SEP-2000; 2000US-0236370P.
PR   02-OCT-2000; 2000US-0236802P.
PR   02-OCT-2000; 2000US-0237037P.
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PR   02-OCT-2000; 2000US-0237039P.
PR   02-OCT-2000; 2000US-0237040P.
PR   13-OCT-2000; 2000US-0239935P.
PR   13-OCT-2000; 2000US-0239937P.
PR   20-OCT-2000; 2000US-0240960P.
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PR   20-OCT-2000; 2000US-0241785P.
PR   20-OCT-2000; 2000US-0241786P.
PR   20-OCT-2000; 2000US-0241787P.
PR   20-OCT-2000; 2000US-0241808P.
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PR   08-NOV-2000; 2000US-0246474P.
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PR   08-NOV-2000; 2000US-0246523P.
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PR   08-NOV-2000; 2000US-0246528P.
PR   08-NOV-2000; 2000US-0246532P.
PR   08-NOV-2000; 2000US-0246609P.
PR   08-NOV-2000; 2000US-0246610P.
PR   08-NOV-2000; 2000US-0246611P.
PR   08-NOV-2000; 2000US-0246613P.
PR   17-NOV-2000; 2000US-0249207P.
PR   17-NOV-2000; 2000US-0249208P.
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PR   17-NOV-2000; 2000US-0249209P.
PR   17-NOV-2000; 2000US-0249210P.
PR   17-NOV-2000; 2000US-0249211P.
PR   17-NOV-2000; 2000US-0249212P.
PR   17-NOV-2000; 2000US-0249213P.
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PR   17-NOV-2000; 2000US-0249265P.
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PR   17-NOV-2000; 2000US-0249299P.
PR   17-NOV-2000; 2000US-0249300P.
PR   01-DEC-2000; 2000US-0250160P.
PR   01-DEC-2000; 2000US-0250391P.
PR   05-DEC-2000; 2000US-0251030P.
PR   05-DEC-2000; 2000US-0251988P.
PR   05-DEC-2000; 2000US-0256719P.
PR   06-DEC-2000; 2000US-0251479P.
PR   08-DEC-2000; 2000US-0251856P.
PR   08-DEC-2000; 2000US-0251868P.
PR   08-DEC-2000; 2000US-0251869P.
PR   08-DEC-2000; 2000US-0251989P.
PR   08-DEC-2000; 2000US-0251990P.
PR   11-DEC-2000; 2000US-0254097P.
PR   05-JAN-2001; 2001US-0259678P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-483426/52.
XX
PT   Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS   Disclosure; SEQ ID NO 40931; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting the
CC   nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 10396 BP; 3175 A; 2158 C; 2127 G; 2936 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 50;  DB 4;  Length 10396;
  Best Local Similarity   100.0%;  Pred. No. 1.4e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             ||||||||||||||||||||||||||||||||||||||||||||||||||
Db       5597 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 5646


RESULT 45
ABA20857
ID   ABA20857 standard; DNA; 11234 BP.
XX
AC   ABA20857;
XX
DT   23-JAN-2002  (first entry)
XX
DE   Human nervous system related polynucleotide SEQ ID NO 13188.
XX
KW   Human; nootropic; neuroprotective; cytostatic; dermatological; virucide;
KW   immunosuppressive; antiinflammatory; anti-HIV; antibacterial; vulnerary;
KW   antiparkinsonian; antisickling; antianaemic; antiarthritic; cancer;
KW   antirheumatic; hepatotropic; cerebroprotective; antiinflammatory;
KW   antiallergic; antidiabetic; antiulcer; anticonvulsant; antifungal;
KW   antiparasitic; cardiant; immune disorder; cardiovascular disorder;
KW   neurological disease; infection; nephrotropic; gene therapy; vaccine; ds.
XX
OS   Homo sapiens.
XX
PN   WO200159063-A2.
XX
PD   16-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001334.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
PR   16-MAR-2000; 2000US-0189874P.
PR   17-MAR-2000; 2000US-0190076P.
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PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
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PR   26-JUL-2000; 2000US-0220964P.
PR   14-AUG-2000; 2000US-0224518P.
PR   14-AUG-2000; 2000US-0224519P.
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PR   14-AUG-2000; 2000US-0225266P.
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PR   14-AUG-2000; 2000US-0225268P.
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PR   14-AUG-2000; 2000US-0225759P.
PR   18-AUG-2000; 2000US-0226279P.
PR   22-AUG-2000; 2000US-0226681P.
PR   22-AUG-2000; 2000US-0226868P.
PR   22-AUG-2000; 2000US-0227182P.
PR   23-AUG-2000; 2000US-0227009P.
PR   30-AUG-2000; 2000US-0228924P.
PR   01-SEP-2000; 2000US-0229287P.
PR   01-SEP-2000; 2000US-0229343P.
PR   01-SEP-2000; 2000US-0229344P.
PR   01-SEP-2000; 2000US-0229345P.
PR   05-SEP-2000; 2000US-0229509P.
PR   05-SEP-2000; 2000US-0229513P.
PR   06-SEP-2000; 2000US-0230437P.
PR   06-SEP-2000; 2000US-0230438P.
PR   08-SEP-2000; 2000US-0231242P.
PR   08-SEP-2000; 2000US-0231243P.
PR   08-SEP-2000; 2000US-0231244P.
PR   08-SEP-2000; 2000US-0231413P.
PR   08-SEP-2000; 2000US-0231414P.
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PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
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PR 01-DEC-2000; 2000US-0251160P.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-541565/60.
XX
PT Nucleic acids encoding 3224 human nervous system antigen polypeptides,
PT useful for preventing, diagnosing and/or treating nervous system cancers
PT and metastases.
XX
PS Disclosure; SEQ ID NO 13188; 1701pp + Sequence Listing; English.
XX
CC The invention relates to novel genes (ABA11004-ABA21534) and proteins
CC (ABB14678-ABB18001) useful for preventing, treating or ameliorating
CC medical conditions e.g. by protein or gene therapy. The genes are
CC isolated from a range of human tissues disclosed in the specification.
CC The nucleic acids, proteins, antibodies and (ant)agonists are useful in
CC the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and
CC ovarian cancer and other cancers of the adrenal gland, bone, bone marrow,
CC breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune
CC disorders e.g. Addison's disease, allergies, autoimmune haemolytic
CC anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease,
CC multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c)
CC cardiovascular disorders such as myocardial ischaemias; (d) wound healing
CC ; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f)
CC infectious diseases such as viral, bacterial, fungal and parasitic
CC infections. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 11234 BP; 3094 A; 2417 C; 2869 G; 2854 T; 0 U; 0 Other;

Query Match 1.6%; Score 50; DB 5; Length 11234;
Best Local Similarity 100.0%; Pred. No. 1.4e-12;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 11155 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 11204

RESULT 46
AAK80184/c
ID AAK80184 standard; DNA; 13026 BP.
XX
AC AAK80184;
XX
DT 07-NOV-2001 (first entry)
XX
DE Human immune/haematopoietic antigen genomic sequence SEQ ID NO:34996.
XX
KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS Homo sapiens.
XX
PN WO200157182-A2.
XX

PD 09-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001354.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.

```
XX
PT   Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS   Disclosure; SEQ ID NO 34996; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting the
CC   nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 13026 BP; 4098 A; 2489 C; 2384 G; 4055 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 50;  DB 4;  Length 13026;
  Best Local Similarity   100.0%;  Pred. No. 1.4e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db       8926 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 8877


RESULT 47
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ID   AAK80185 standard; DNA; 13026 BP.
XX
AC   AAK80185;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:34997.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
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XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 34997; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 13026 BP; 4098 A; 2489 C; 2384 G; 4055 T; 0 U; 0 Other;

Query Match 1.6%; Score 50; DB 4; Length 13026;
Best Local Similarity 100.0%; Pred. No. 1.4e-12;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db 8926 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 8877

RESULT 48
AAL05461/c
ID AAL05461 standard; DNA; 31474 BP.
XX
AC AAL05461;
XX
DT 21-NOV-2001 (first entry)
XX
DE Human reproductive system related antigen DNA SEQ ID NO: 8149.
XX
KW Human; reproductive system related antigen; reproductive system disorder;
KW cancer; gene therapy; ds.
XX
OS Homo sapiens.
XX
PN WO200155320-A2.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001339.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
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PR 20-OCT-2000; 2000US-0241809P.
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PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
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PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-465570/50.
XX
PT Isolated nucleic acid molecule encoding a reproductive system antigen is
PT used in preventing, treating or ameliorating a medical condition.
XX
PS Disclosure; SEQ ID NO 8149; 1297pp + Sequence Listing; English.
XX
CC The present invention provides the protein and coding sequences of a
CC number of human reproductive system related antigens. These can be used
CC in the prevention and treatment of reproductive system disorders,
CC including cancer. The present sequence is a genomic sequence encoding a
CC protein of the invention
XX
SQ Sequence 31474 BP; 9245 A; 6055 C; 6292 G; 9882 T; 0 U; 0 Other;

Query Match 1.6%; Score 50; DB 4; Length 31474;
Best Local Similarity 100.0%; Pred. No. 1.3e-12;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db 72 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 23

RESULT 49
ABL98314/c
ID ABL98314 standard; DNA; 31474 BP.
XX
AC ABL98314;
XX
DT 21-JUN-2002 (first entry)
XX
DE Human testicular antigen encoding DNA fragment SEQ ID NO: 2966.
XX
KW Human; testicular antigen; testes; cancer; metastasis; immune disorder;
KW reproductive system disorder; urinary system disorder; gene therapy;
KW cardiovascular disorder; respiratory disorder; neurological disorder;
KW gastrointestinal disease; infection; cytostatic; gene; ds.
XX
OS Homo sapiens.
XX
PN WO200155317-A2.
XX

PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001329.
XX
PR 31-JAN-2000; 2000US-0179065P.
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PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
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PR 08-DEC-2000; 2000US-0251989P.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483232/52.

```
XX
PT   Nucleic acids encoding 973 human testicular antigen polypeptides, useful
PT   for preventing, diagnosing and/or treating testicular cancer.
XX
PS   Disclosure; SEQ ID NO 2966; 766pp; English.
XX
CC   The present invention provides the protein and coding sequences of 973
CC   human testicular antigens, and fragments of their genomic sequences. The
CC   sequences can be used in the treatment of cardiovascular, urinary system,
CC   reproductive system, immune, respiratory, neurological and
CC   gastrointestinal disorders, infections, and particularly cancer,
CC   especially testicular cancers. The present sequence is a DNA encoding a
CC   protein fragment of the invention
XX
SQ   Sequence 31474 BP; 9245 A; 6055 C; 6292 G; 9882 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 50;  DB 4;  Length 31474;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db         72 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 23


RESULT 50
AAS30115/c
ID   AAS30115 standard; DNA; 32189 BP.
XX
AC   AAS30115;
XX
DT   21-NOV-2001  (first entry)
XX
DE   Human lung antigen genomic DNA #185.
XX
KW   Lung antigen protein; human; mouse; rabbit; goat; horse; cat; dog;
KW   chicken; sheep; immunosuppressive; antiarthritic; vasotropic;
KW   antirheumatic; antiproliferative; cytostatic; cardiant; neuroprotective;
KW   cerebroprotective; nootropic; antibacterial; virucide; fungicide; cancer;
KW   ophthalmological; vulnerary; gene therapy; autoimmune disease; neoplasm;
KW   hyperproliferative disorder; breast; liver; cardiovascular disorder; ds;
KW   cerebrovascular disorder; nervous system disorder; bacterial infection;
KW   fungal infection; viral infection; ocular disorder; endocrine disorder;
KW   gastrointestinal disorder; renal disorder; respiratory disorder;
KW   wound healing; skin aging; organ transplantation; food preservative;
KW   tissue regeneration; anti-infertility; food additive.
XX
OS   Homo sapiens.
XX
PN   WO200155303-A2.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001301.
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PR   31-JAN-2000; 2000US-0179065P.
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XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-457723/49.
XX
PT   Isolated polypeptide for treating, preventing and/ or prognosing
PT   respiratory disorders related to the lung including lung cancers and also
PT   for testing and detection e.g. diagnosis.
XX
PS   Claim 1; SEQ ID NO 379; 507pp; English.
XX
CC   Sequences AAS29931-AAS30164 represent genomic DNA molecules, which encode
CC   the lung antigen polypeptides of the invention. Lung antigen polypeptides
CC   and their associated polynucleotides are useful in the diagnosis,
CC   treatment and prevention of various types of disorders in e.g. humans,
CC   mice, rabbits, goats, horses, cats, dogs, chickens or sheep. A
CC   pathological condition can be determined by detecting the presence or
CC   absence of a mutation in a lung antigen polynucleotide. The treatable
CC   disorders include autoimmune diseases such as rheumatoid arthritis,
CC   hyperproliferative disorders such as neoplasms of the breast or liver,
CC   cardiovascular disorders such as cardiac arrest, cerebrovascular
CC   disorders such as cerebral ischaemia, nervous system disorders such as
CC   Alzheimer's disease, infections caused by bacteria, viruses and fungi,
CC   ocular disorders such as corneal infection, endocrine disorders such as
CC   premature labour and infertility, gastrointestinal disorders such as
CC   Crohn's disease, renal disorders such as glomerulonephritis and
CC   respiratory disorders such as asthma and pleurisy. The polypeptides can
CC   also be used to aid wound healing, to prevent skin aging due to sunburn,
CC   to maintain organs before transplantation, to regenerate tissues and in
CC   chemotaxis. The polypeptides can also be used as a food additive or
CC   preservative to increase or decrease storage capabilities. Note: The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences

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Db      12517 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 12468


RESULT 51
ADB33452/c
ID   ADB33452 standard; DNA; 32189 BP.
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AC   ADB33452;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human novel lung related polypeptide DNA SEQ ID NO 379.
XX
KW   gene therapy; lung antigen; neoplasia; acute myelogenous leukaemia;
KW   adenocarcinoma; respiratory disorder; chronic rhinitis; sinusitis;
KW   immunodeficiency; X-linked agammaglobulinaemia;
KW   X-linked infantile agammaglobulinaemia; inflammatory disorder;
KW   adrenalitis; alveolitis; immune complex disease; serum sickness;
KW   polyarteritis nodosa; bleeding disorder; thrombocytopenia;
KW   Von Willebrand's disease; acquired platelet dysfunction; kidney failure;
KW   multiple myeloma; macrophage related disorder; Gaucher's disease;
KW   Neimann-Pick disease; tumour; colon cancer; pancreatic cancer;
KW   renal disorder; nephritis; bone disorder; Albers-Schonberg disease;
KW   bowleg; muscle disorder; Becker's muscular dystrophy;
KW   Duchenne's muscular dystrophy; nervous disorder; ischaemic lesion;
KW   traumatic lesion; endocrine disorder; Cushing's syndrome;
KW   corticosteroid deficiency; gastrointestinal disorder; dysphagia;
KW   gastric reflux; human; ds.
XX
OS   Homo sapiens.
XX
PN   US2003054368-A1.
XX
PD   20-MAR-2003.
XX
PF   22-FEB-2002; 2002US-00079854.
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PR 17-JAN-2001; 2001US-00764878.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM, Barash SC;
XX
DR WPI; 2003-695900/66.
XX
PT Novel isolated lung antigen polypeptides useful for treating, preventing,
PT diagnosing acute myelogenous leukemias, adenocarcinoma, thrombocytopenia,
PT Von Willebrand's disease.
XX
PS Disclosure; SEQ ID NO 379; 178pp; English.
XX
CC The invention relates to an isolated lung antigen polypeptide sequence or
CC encoded sequence in a cDNA clone. The polypeptide and its polynucleotide
CC are useful for treating, preventing, diagnosing and/or prognosing
CC diseases and/or disorders such as pathological cell proliferative
CC neoplasias e.g. acute myelogenous leukaemias, adenocarcinoma; respiratory
CC disorders such as chronic rhinitis, sinusitis; immunodeficiencies such as
CC X-linked agammaglobulinaemia, X-linked infantile agammaglobulinaemia;
CC inflammatory disorders such as adrenalitis, alveolitis; immune complex
CC diseases such as serum sickness, polyarteritis nodosa; bleeding disorders
CC such as thrombocytopenia, Von Willebrand's disease; acquired platelet
CC dysfunction such as kidney failure, multiple myeloma; disorders
CC associated with macrophage numbers and/or macrophage function such as
CC Gaucher's disease, Neimann-Pick disease; tumours such as colon cancer,
CC pancreatic cancer; renal disorders such as kidney failure, nephritis;
CC bone disorders such as Albers-Schonberg disease, bowlegs; muscle
CC disorders such as Becker's muscular dystrophy, Duchenne's muscular
CC dystrophy; nervous disorders such as ischaemic lesions, traumatic lesions

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CC   ; endocrine disorders such as Cushing's syndrome, corticosteroid

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AC   AAD16595;
XX
DT   19-NOV-2001  (first entry)
XX
DE   Human novel protein-encoding gene 7, SEQ ID NO:37.
XX
KW   Human; iron-associated protein; gene therapy; autoimmune disease;
KW   rheumatoid arthritis; hyperproliferative disorder; neoplasm; fungicide;
KW   cardiovascular disorder; cardiac arrest; cerebrovascular disorder;
KW   cerebral ischaemia; angiogenesis; nervous system disorder; chemotaxis;
KW   Alzheimer's disease; infection; ocular disorder; cerebroprotective;
KW   skin aging; food additive; food preservative; immunosuppressive;
KW   antiarthritic; antiproliferative; wound healing; cardiant; vasotropic;
KW   nootropic; cytostatic; antirheumatic; neuroprotective; antibacterial;
KW   virucide; opthalmalogical; chromosome 2q33-q34; ds.
XX
OS   Homo sapiens.
XX
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PN   WO200155307-A2.
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PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001306.
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PR   31-JAN-2000; 2000US-0179065P.
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RESULT 53
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ID   AAL36258 standard; DNA; 32193 BP.
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AC   AAL36258;
XX
DT   08-JAN-2002  (first entry)
XX
DE   Human musculoskeletal system related polynucleotide SEQ ID NO 2623.
XX
KW   Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
KW   antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer;
KW   vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;
KW   cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
KW   neurological disease; infection; human; secreted protein;
KW   musculoskeletal system; ds.
XX
OS   Homo sapiens.
XX
PN   WO200155367-A1.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001338.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-451937/48.
XX
PT Isolated polypeptide for treating, preventing and/ or prognosing
PT disorders related to the musculoskeletal system including musculoskeletal
PT cancers and also for testing and detection e.g. diagnosis.
XX
PS Example 2; SEQ ID NO 2623; 781pp + Sequence Listing; English.
XX
CC The invention relates to novel genes (AAL34669-AAL37666) and proteins
CC (ABB03087-ABB04109) associated with the musculoskeletal system useful for
CC preventing, treating or ameliorating medical conditions e.g. by protein
CC or gene therapy. The genes are isolated from a range of human tissues
CC disclosed in the specification. The nucleic acids, proteins, antibodies
CC and (ant)agonists are useful in the diagnosis, treatment and prevention
CC of: (a) cancer, e.g. breast and ovarian cancer and other cancers of the
CC adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver,
CC lung, or urogenital; (b) immune disorders e.g. Addison's disease,
CC allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis,
CC diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid
CC arthritis and ulcerative colitis; (c) cardiovascular disorders such as
CC myocardial ischaemias; (d) wound healing; (e) neurological diseases e.g.
CC cerebral anoxia and epilepsy; and (f) infectious diseases such as viral,
CC bacterial, fungal and parasitic infections. Note: The sequence data for
CC this patent did not form part of the printed specification, but was
CC obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 32193 BP; 10182 A; 6701 C; 6066 G; 9244 T; 0 U; 0 Other;

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Db      28855 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 28806
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RESULT 54
ABX59246/c
ID ABX59246 standard; cDNA; 32193 BP.
XX
AC ABX59246;
XX
DT 26-FEB-2003 (first entry)
XX
DE cDNA encoding novel human musculoskeletal system antigen #1590.
XX
KW Gene; ss; musculoskeletal system antigen; cancer; metastasis;

KW re-vascularisation; thrombosis; arteriosclerosis; mineral content;
KW cardiovascular condition; wound; injury; burn; angiogenesis; ulcer;
KW post-operative tissue repair; limb regeneration; neuronal growth;
KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW AIDS-related complex; chondrocyte growth; bone regeneration;
KW periodontal regeneration; tissue transport; bone graft; skin aging;
KW keratinocyte growth; hair loss; melanocyte growth; cell proliferation;
KW cell growth; organ transplant; cell differentiation; body height; weight;
KW hair colour; eye colour; skin; percentage of adipose tissue;
KW pigmentation; cosmetic surgery; metabolism; biorhythm; caricadic rhythm;
KW depression; tendency for violence; pain; reproductive capability;
KW hormone level; endocrine level; appetite; libido; memory; stress;
KW storage capability; fat content; lipid content; protein content;
KW carbohydrate content; vitamin content; cofactor content;
KW nutritional component.
XX
OS Homo sapiens.
XX
PN US2002147140-A1.
XX
PD 10-OCT-2002.
XX
PF 17-JAN-2001; 2001US-00764877.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
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PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
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PR 27-SEP-2000; 2000US-0235834P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
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XX
PA (ROSE/) ROSEN C A.
PA (RUBE/) RUBEN S M.
PA (BARA/) BARASH S C.
XX
PI Rosen CA, Ruben SM, Barash SC;
XX
DR WPI; 2003-128199/12.
XX
PT Isolated nucleic acid molecules encoding musculoskeletal system
PT associated polypeptides, useful for detecting disorders, e.g. cancer.
XX
PS Disclosure; SEQ ID NO 2623; 321pp; English.
XX
CC The invention describes an isolated nucleic acid molecule comprising a
CC sequence encoding musculoskeletal system associated polypeptides useful
CC for detecting disorders, e.g., cancer or cancer metastases, in animals or
CC humans. The nucleic acid: stimulates re-vascularisation of ischaemic
CC tissues associated with conditions such as thrombosis, arteriosclerosis,
CC and other cardiovascular conditions; treats wounds due to injuries,
CC burns, post-operative tissue repair, and ulcers; stimulates angiogenesis
CC and limb regeneration; stimulates neuronal growth; can treat and prevent
CC neuronal damage occurring in certain disorders or neurodegenerative
CC conditions, such as, Alzheimer's disease, Parkinson's disease, and AIDS-
CC related complex; stimulates chondrocyte growth, thus they can be used to
CC enhance bone and periodontal regeneration and aid in tissue transports or
CC bone grafts; prevents skin aging due to sunburn by stimulating
CC keratinocyte growth; prevents hair loss, since FGF family members
CC activate hair-forming cells and promotes melanocyte growth; stimulates
CC growth and differentiation of hematopoietic cells and bone marrow cells
CC when used in combination with other cytokines; maintains organs before
CC transplantation or for supporting cell culture of primary tissues;
CC induces tissue of mesodermal origin to differentiate in early embryos;
CC increases or decreases the differentiation or proliferation of embryonic
CC stem cells, besides, haematopoietic lineage; modulates mammalian
CC characteristics, such as, body height, weight, hair colour, eye colour,
CC skin, percentage of adipose tissue, pigmentation, size, and shape (e.g.,
CC cosmetic surgery); modulates mammalian metabolism; changes mammal's metal
CC state or physical state by influencing biorhythms, caricadic rhythms,
CC depression, tendency for violence, tolerance for pain, reproductive
CC capabilities, hormonal or endocrine levels, appetite, libido, memory, or
CC stress; increases or decreases storage capabilities, fat content, lipid,
CC protein, carbohydrate, vitamins, minerals, cofactors or other nutritional
CC components. This sequence encodes a novel human musculoskeletal system
CC antigen. Note: The sequence data for this patent did not form part of the
CC printed specification, but was obtained in electronic format directly
CC from the US patent office at
CC ftp.seqdata.uspto.gov/sequence.html?DocID=20020147140
XX
SQ Sequence 32193 BP; 10182 A; 6701 C; 6066 G; 9244 T; 0 U; 0 Other;

Query Match 1.6%; Score 50; DB 8; Length 32193;
Best Local Similarity 100.0%; Pred. No. 1.3e-12;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 55
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ID ADG62943 standard; DNA; 32193 BP.
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AC ADG62943;
XX
DT 11-MAR-2004 (first entry)
XX
DE Genomic DNA encoding human NOVX protein seq id 37.
XX
KW neuroprotective; nootropic; respiratory; cardiovascular;
KW gastrointestinal; antiparkinsonian; immunosuppressive; dermatological;

KW antiinflammatory; antirheumatic; antiarthritic; antithyroid; antianaemic;
KW antidiabetic; hepatotropic; antiasthmatic; antiallergic; nephrotropic;
KW antiarteriosclerotic; cardiant; anti-HIV; virucide; antibacterial;
KW fungicide; gynaecological; cytostatic; gene therapy; neural disorder;
KW immune system disorder; muscular disorder; reproductive disorder;
KW gastrointestinal disorder; pulmonary disorder; cardiovascular disorder;
KW renal disorder; proliferative disorder; cancer;
KW systemic lupus erythematosus; rheumatoid arthritis; multiple sclerosis;
KW thyroiditis; anaemia; Grave's disease; diabetes; hepatitis; asthma;
KW allergy; nephritis; Parkinson's disease; Alzheimer's disease;
KW atherosclerosis; myocardial infarction; AIDS; infection; human; gene; ss;
KW NOVX.
XX
OS Homo sapiens.
XX
PN US2003207285-A1.
XX
PD 06-NOV-2003.
XX
PF 12-AUG-2002; 2002US-00216464.
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PR   08-DEC-2000; 2000US-0251869P.
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PR   08-DEC-2000; 2000US-0251990P.
PR   11-DEC-2000; 2000US-0254097P.
PR   05-JAN-2001; 2001US-0259678P.
PR   17-JAN-2001; 2001US-00764883.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM,  Barash SC;
XX
DR   WPI; 2003-901052/82.
XX
PT   New polypeptides and nucleic acid molecules for diagnosing, preventing or
PT   treating diseases associated with aberrant expression or activity of the
PT   polypeptide, e.g. cancer, asthma, AIDS, Parkinson's disease or diabetes.
XX
PS   Disclosure; SEQ ID NO 37; 194pp; English.
XX
CC   The invention describes an isolated nucleic acid molecule (I) encoding a
CC   protein comprising a sequence that is at least 95% identical to: a
CC   polynucleotide fragment of any of the nucleotide sequences listed in the
CC   specification, or of the cDNA sequences listed in the specification,
CC   which is hybridisable to the nucleotide sequences; a polynucleotide
CC   encoding a polypeptide or a polypeptide fragment, domain or epitope of
CC   any of the amino acid sequences listed in the specification, or a
CC   polypeptide or a polypeptide fragment, domain or epitope encoded by the
CC   cDNA sequence mentioned above; a polynucleotide which is an (allelic)
CC   variant of the nucleotide sequences listed in the specification; a
CC   polynucleotide which encodes a species homologue of the above amino acid
CC   sequences; or a polynucleotide capable of hybridising under stringent
CC   conditions to any of the above polynucleotides, where the polynucleotide
CC   does not hybridise under stringent conditions to a nucleic acid molecule
CC   having a nucleotide sequence of only A or T residues. The nucleic acid
CC   molecule and polypeptide are useful in diagnosing, preventing, prognosing
CC   or treating diseases or disorders associated with aberrant expression
CC   and/or activity of the above polypeptide, such as neural disorders,
CC   immune system disorders, muscular disorders, reproductive disorders,

  Query Match             1.6%;  Score 50;  DB 10;  Length 32193;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db      28855 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 28806


RESULT 56
ADJ29996/c
ID   ADJ29996 standard; DNA; 32193 BP.
XX
AC   ADJ29996;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human musculoskeletal system-associated genomic DNA - SEQ ID 2623.
XX
KW   musculoskeletal system; cytostatic; osteopathic; cancer; osteoporosis;
KW   gene therapy; vaccine; human; ds.
XX
OS   Homo sapiens.
XX
PN   US2004009488-A1.
XX
PD   15-JAN-2004.
XX
PF   13-SEP-2002; 2002US-00242515.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
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PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
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PR   14-JUL-2000; 2000US-0218290P.
PR   26-JUL-2000; 2000US-0220963P.
PR   26-JUL-2000; 2000US-0220964P.
PR   14-AUG-2000; 2000US-0224518P.
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PR   14-AUG-2000; 2000US-0225268P.
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PR   14-SEP-2000; 2000US-0232399P.
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PR   14-SEP-2000; 2000US-0232401P.
PR   14-SEP-2000; 2000US-0233063P.
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PR   14-SEP-2000; 2000US-0233065P.
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PR   21-SEP-2000; 2000US-0234274P.
PR   25-SEP-2000; 2000US-0234997P.
PR   25-SEP-2000; 2000US-0234998P.
PR   26-SEP-2000; 2000US-0235484P.
PR   27-SEP-2000; 2000US-0235834P.
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PR   29-SEP-2000; 2000US-0236327P.
PR   29-SEP-2000; 2000US-0236367P.
PR   29-SEP-2000; 2000US-0236368P.
PR   29-SEP-2000; 2000US-0236369P.
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PR 29-SEP-2000; 2000US-0236370P.
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PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
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PR 08-NOV-2000; 2000US-0246478P.
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PR 08-NOV-2000; 2000US-0246525P.
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PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
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PR 17-NOV-2000; 2000US-0249207P.
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PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
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PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
PR 17-JAN-2001; 2001US-00764877.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM, Barash SC;
XX
DR WPI; 2004-090458/09.
XX
PT New nucleic acid molecule, useful for preparing a medicament for
PT preventing, treating or ameliorating a medical condition e.g., cancer of
PT musculoskeletal tissues or osteoporosis.
XX
PS Disclosure; SEQ ID NO 2623; 289pp; English.
XX
CC The invention relates to a novel isolated musculoskeletal system-
CC associated nucleic acid molecule. The nucleic acid of the invention
CC demonstrates cytostatic and osteopathic activities and may be useful for
CC preparing a medicament for preventing, treating or ameliorating a medical
CC condition such as cancer of the musculoskeletal tissues or osteoporosis,
CC possibly via gene therapy or vaccine production. The current sequence is
CC that of the human musculoskeletal system-associated genomic DNA of the
CC invention. The current sequence is not shown within the specification per
CC se but is available on the USPTO web-site
CC http:seqdata.uspto.gov/sequence.html?DocID=20040009488.
XX
SQ Sequence 32193 BP; 10182 A; 6701 C; 6066 G; 9244 T; 0 U; 0 Other;

Query Match 1.6%; Score 50; DB 12; Length 32193;
Best Local Similarity 100.0%; Pred. No. 1.3e-12;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db 28855 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 28806

RESULT 57
AAS30113/c
ID AAS30113 standard; DNA; 32221 BP.
XX
AC AAS30113;
XX
DT 21-NOV-2001 (first entry)
XX
DE Human lung antigen genomic DNA #183.
XX
KW Lung antigen protein; human; mouse; rabbit; goat; horse; cat; dog;
KW chicken; sheep; immunosuppressive; antiarthritic; vasotropic;
KW antirheumatic; antiproliferative; cytostatic; cardiant; neuroprotective;
KW cerebroprotective; nootropic; antibacterial; virucide; fungicide; cancer;
KW ophthalmological; vulnerary; gene therapy; autoimmune disease; neoplasm;
KW hyperproliferative disorder; breast; liver; cardiovascular disorder; ds;
KW cerebrovascular disorder; nervous system disorder; bacterial infection;
KW fungal infection; viral infection; ocular disorder; endocrine disorder;
KW gastrointestinal disorder; renal disorder; respiratory disorder;
KW wound healing; skin aging; organ transplantation; food preservative;
KW tissue regeneration; anti-infertility; food additive.
XX
OS Homo sapiens.
XX
PN WO200155303-A2.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001301.
XX
PR 31-JAN-2000; 2000US-0179065P.
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PR 24-FEB-2000; 2000US-0184664P.
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PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
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PR 14-JUL-2000; 2000US-0218290P.
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PR 14-AUG-2000; 2000US-0225759P.
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PR 23-AUG-2000; 2000US-0227009P.
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PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
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PR 02-OCT-2000; 2000US-0237038P.
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PR 02-OCT-2000; 2000US-0237040P.
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PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
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PR 20-OCT-2000; 2000US-0241826P.
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PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
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PR 17-NOV-2000; 2000US-0249300P.
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PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
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PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-457723/49.
XX
PT Isolated polypeptide for treating, preventing and/ or prognosing
PT respiratory disorders related to the lung including lung cancers and also
PT for testing and detection e.g. diagnosis.
XX
PS Claim 1; SEQ ID NO 377; 507pp; English.
XX
CC Sequences AAS29931-AAS30164 represent genomic DNA molecules, which encode
CC the lung antigen polypeptides of the invention. Lung antigen polypeptides
CC and their associated polynucleotides are useful in the diagnosis,
CC treatment and prevention of various types of disorders in e.g. humans,
CC mice, rabbits, goats, horses, cats, dogs, chickens or sheep. A
CC pathological condition can be determined by detecting the presence or
CC absence of a mutation in a lung antigen polynucleotide. The treatable
CC disorders include autoimmune diseases such as rheumatoid arthritis,
CC hyperproliferative disorders such as neoplasms of the breast or liver,
CC cardiovascular disorders such as cardiac arrest, cerebrovascular
CC disorders such as cerebral ischaemia, nervous system disorders such as
CC Alzheimer's disease, infections caused by bacteria, viruses and fungi,

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CC   ocular disorders such as corneal infection, endocrine disorders such as
CC   premature labour and infertility, gastrointestinal disorders such as
CC   Crohn's disease, renal disorders such as glomerulonephritis and
CC   respiratory disorders such as asthma and pleurisy. The polypeptides can
CC   also be used to aid wound healing, to prevent skin aging due to sunburn,
CC   to maintain organs before transplantation, to regenerate tissues and in
CC   chemotaxis. The polypeptides can also be used as a food additive or
CC   preservative to increase or decrease storage capabilities. Note: The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences

  Query Match             1.6%;  Score 50;  DB 5;  Length 32221;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db      12548 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 12499


RESULT 58
ADB33450/c
ID   ADB33450 standard; DNA; 32221 BP.
XX
AC   ADB33450;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human novel lung related polypeptide DNA SEQ ID NO 377.
XX
KW   gene therapy; lung antigen; neoplasia; acute myelogenous leukaemia;
KW   adenocarcinoma; respiratory disorder; chronic rhinitis; sinusitis;
KW   immunodeficiency; X-linked agammaglobulinaemia;
KW   X-linked infantile agammaglobulinaemia; inflammatory disorder;
KW   adrenalitis; alveolitis; immune complex disease; serum sickness;
KW   polyarteritis nodosa; bleeding disorder; thrombocytopenia;
KW   Von Willebrand's disease; acquired platelet dysfunction; kidney failure;
KW   multiple myeloma; macrophage related disorder; Gaucher's disease;
KW   Neimann-Pick disease; tumour; colon cancer; pancreatic cancer;
KW   renal disorder; nephritis; bone disorder; Albers-Schonberg disease;
KW   bowleg; muscle disorder; Becker's muscular dystrophy;
KW   Duchenne's muscular dystrophy; nervous disorder; ischaemic lesion;
KW   traumatic lesion; endocrine disorder; Cushing's syndrome;
KW   corticosteroid deficiency; gastrointestinal disorder; dysphagia;
KW   gastric reflux; human; ds.
XX
OS   Homo sapiens.
XX
PN   US2003054368-A1.
XX
PD   20-MAR-2003.
XX
PF   22-FEB-2002; 2002US-00079854.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
PR   16-MAR-2000; 2000US-0189874P.
PR   17-MAR-2000; 2000US-0190076P.
PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
PR   14-JUL-2000; 2000US-0218290P.
PR   26-JUL-2000; 2000US-0220963P.
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PR   14-AUG-2000; 2000US-0224519P.
PR   14-AUG-2000; 2000US-0225213P.
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PR   08-NOV-2000; 2000US-0246475P.
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PR   17-NOV-2000; 2000US-0249209P.
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PR   17-NOV-2000; 2000US-0249211P.
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PR   17-NOV-2000; 2000US-0249213P.
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PR   17-NOV-2000; 2000US-0249215P.
PR   17-NOV-2000; 2000US-0249216P.
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PR   17-NOV-2000; 2000US-0249299P.
PR   17-NOV-2000; 2000US-0249300P.
PR   01-DEC-2000; 2000US-0250160P.
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PR   05-DEC-2000; 2000US-0251030P.
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PR   05-DEC-2000; 2000US-0256719P.
PR   06-DEC-2000; 2000US-0251479P.
PR   08-DEC-2000; 2000US-0251856P.
PR   08-DEC-2000; 2000US-0251868P.
PR   08-DEC-2000; 2000US-0251869P.
PR   08-DEC-2000; 2000US-0251989P.
PR   08-DEC-2000; 2000US-0251990P.
PR   11-DEC-2000; 2000US-0254097P.
PR   05-JAN-2001; 2001US-0259678P.
PR   17-JAN-2001; 2001US-00764878.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM,  Barash SC;
XX
DR   WPI; 2003-695900/66.
XX
PT   Novel isolated lung antigen polypeptides useful for treating, preventing,
PT   diagnosing acute myelogenous leukemias, adenocarcinoma, thrombocytopenia,
PT   Von Willebrand's disease.
XX
PS   Disclosure; SEQ ID NO 377; 178pp; English.
XX
CC   The invention relates to an isolated lung antigen polypeptide sequence or
CC   encoded sequence in a cDNA clone. The polypeptide and its polynucleotide
CC   are useful for treating, preventing, diagnosing and/or prognosing
CC   diseases and/or disorders such as pathological cell proliferative
CC   neoplasias e.g. acute myelogenous leukaemias, adenocarcinoma; respiratory
CC   disorders such as chronic rhinitis, sinusitis; immunodeficiencies such as
CC   X-linked agammaglobulinaemia, X-linked infantile agammaglobulinaemia;
CC   inflammatory disorders such as adrenalitis, alveolitis; immune complex
CC   diseases such as serum sickness, polyarteritis nodosa; bleeding disorders
CC   such as thrombocytopenia, Von Willebrand's disease; acquired platelet
CC   dysfunction such as kidney failure, multiple myeloma; disorders
CC   associated with macrophage numbers and/or macrophage function such as
CC   Gaucher's disease, Neimann-Pick disease; tumours such as colon cancer,
CC   pancreatic cancer; renal disorders such as kidney failure, nephritis;
CC   bone disorders such as Albers-Schonberg disease, bowlegs; muscle
CC   disorders such as Becker's muscular dystrophy, Duchenne's muscular
CC   dystrophy; nervous disorders such as ischaemic lesions, traumatic lesions
CC   ; endocrine disorders such as Cushing's syndrome, corticosteroid

  Query Match             1.6%;  Score 50;  DB 10;  Length 32221;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db      12548 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 12499


RESULT 59
ABK22783
ID   ABK22783 standard; cDNA; 36305 BP.
XX
AC   ABK22783;
XX
DT   09-APR-2002  (first entry)
XX
DE   Human high bone mass (HBM) polynucleotide clone #6.
XX
KW   Human; mouse; Zmax1; HBM; high bone mass gene; lipid regulation; stroke;
KW   lipid-associated condition; arteriosclerosis; cardiovascular disease; ss;
KW   osteoporosis; atherosclerosis; diabetic atherosclerosis; plaque build-up;
KW   neurovascular condition; wound healing; gene therapy; PCR primer; probe;
KW   bone development disorder; antiarteriosclerotic; cardiovascular;
KW   osteopathic; cerebroprotective.
XX
OS   Homo sapiens.
XX
PN   WO200192891-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016946.
XX
PR   26-MAY-2000; 2000US-00578900.
XX
PA   (GENO-) GENOME THERAPEUTICS CORP.
PA   (UYCR-) UNIV CREIGHTON SCHOOL MEDICINE.
XX
PI   Carulli JP,  Little RD,  Recker RR,  Johnson ML;
XX
DR   WPI; 2002-097784/13.
XX
PT   Identifying molecules involved in lipid regulation, useful for
PT   diagnosing, treating or preventing e.g., arteriosclerosis, comprises
PT   identifying a molecule that binds to high bone mass gene or its
PT   corresponding wild type gene.
XX
PS   Example 2; Page 323-350; 409pp; English.
XX
CC   The invention relates to a method for identifying a molecule involved in
CC   lipid regulation comprising identifying a molecule that binds to or
CC   inhibits binding of a molecule to high bone mass (HBM) or its wild type
CC   gene, Zmax1. Compounds identified by the method are useful for treating,
CC   diagnosing, preventing or screening for normal and abnormal lipid-
CC   associated conditions, including arteriosclerosis, cardiovascular
CC   disease, stroke, and osteoporosis. The compounds may also be used in the
CC   treatment or prevention of diabetic atherosclerosis, neurovascular
CC   conditions caused by plaque build-up, poor circulation due to plaque
CC   build-up and associated poor wound healing. The methods may be used in
CC   gene therapy, pharmaceutical development, and diagnostic assays for bone
CC   development disorders. Molecules identified by comparison of Zmax1 and
CC   HBM systems can be used as surrogate markers in pharmaceutical
CC   development, in diagnosis of human or animal bone disease, and in the
CC   treatment of bone diseases. Sequences ABK22776-ABK23411 represent cDNA
CC   molecules encoding human Zmax1 and HBM, and PCR primers, probes, linkers
CC   and adapters of the invention
XX
```

```
SQ   Sequence 36305 BP; 7938 A; 9658 C; 10106 G; 8602 T; 0 U; 1 Other;

  Query Match             1.6%;  Score 50;  DB 6;  Length 36305;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db       5112 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 5161


RESULT 60
ACN44230/c
ID   ACN44230 standard; DNA; 66973 BP.
XX
AC   ACN44230;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Human genomic sequence hCG21559.
XX
KW   Cytostatic; carcinoma; lymphoma; cancer; human; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003073826-A2.
XX
PD   12-SEP-2003.
XX
PF   28-FEB-2003; 2003WO-US006235.
XX
PR   01-MAR-2002; 2002US-00087192.
XX
PA   (SAGR-) SAGRES DISCOVERY.
XX
PI   Morris DW;
XX
DR   WPI; 2003-328604/31.
XX
PT   Recombinant nucleic acid useful for diagnosis and treatment of carcinoma
PT   comprises a nucleotide sequence.
XX
PS   Claim 1; SEQ ID NO 574; 0pp; English.
XX
CC   The present invention relates to novel DNA and protein sequences which
CC   are associated with carcinomas. The sequences are useful for: (i) for
CC   screening drug candidates; (ii) for screening of bioactive agent capable
CC   of binding to Carcinoma Associated Protein (CAP); (iii) for screening of
CC   a bioactive agent capable of modulating the activity of CAP; (iv) for
CC   evaluating the effect of a candidate carcinoma drug; (v) for diagnosing
CC   carcinoma; (vi) for inhibiting the activity of CAP; (vii) for treating
CC   carcinoma; (viii) for neutralizing the effect of CAP; (ix) as a biochip;
CC   (x) for diagnosing carcinoma or a propensity to carcinoma; and (xi) for
CC   determining Carcinoma Associated (CA) gene copy number. In addition, the
CC   CA genes are useful as DNA vaccines and the CAP are useful as markers of
CC   carcinoma including lymphoma. The present sequence is one such CA coding
CC   sequence. Note: This patent is an equivalent to basic patent
CC   US2002182586A1, for which no sequence data was published
XX
SQ   Sequence 66973 BP; 17853 A; 15429 C; 15874 G; 17537 T; 0 U; 280 Other;

  Query Match             1.6%;  Score 50;  DB 11;  Length 66973;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db      29006 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 28957


RESULT 61
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ID   ACN44786 standard; DNA; 156843 BP.
XX
AC   ACN44786;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Human genomic sequence hCG27192.
XX
KW   Cytostatic; carcinoma; lymphoma; cancer; human; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003073826-A2.
XX
PD   12-SEP-2003.
XX
PF   28-FEB-2003; 2003WO-US006235.
XX
PR   01-MAR-2002; 2002US-00087192.
XX
PA   (SAGR-) SAGRES DISCOVERY.
XX
PI   Morris DW;
XX
DR   WPI; 2003-328604/31.
XX
PT   Recombinant nucleic acid useful for diagnosis and treatment of carcinoma
PT   comprises a nucleotide sequence.
XX
PS   Claim 1; SEQ ID NO 1408; 0pp; English.
XX
CC   The present invention relates to novel DNA and protein sequences which
CC   are associated with carcinomas. The sequences are useful for: (i) for
CC   screening drug candidates; (ii) for screening of bioactive agent capable
CC   of binding to Carcinoma Associated Protein (CAP); (iii) for screening of
CC   a bioactive agent capable of modulating the activity of CAP; (iv) for
CC   evaluating the effect of a candidate carcinoma drug; (v) for diagnosing
CC   carcinoma; (vi) for inhibiting the activity of CAP; (vii) for treating
CC   carcinoma; (viii) for neutralizing the effect of CAP; (ix) as a biochip;
CC   (x) for diagnosing carcinoma or a propensity to carcinoma; and (xi) for
CC   determining Carcinoma Associated (CA) gene copy number. In addition, the
CC   CA genes are useful as DNA vaccines and the CAP are useful as markers of
CC   carcinoma including lymphoma. The present sequence is one such CA coding
CC   sequence. Note: This patent is an equivalent to basic patent
CC   US2002182586A1, for which no sequence data was published
XX
SQ   Sequence 156843 BP; 33001 A; 41006 C; 43823 G; 38715 T; 0 U; 298 Other;

  Query Match             1.6%;  Score 50;  DB 11;  Length 156843;
  Best Local Similarity   100.0%;  Pred. No. 1.2e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db     148232 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 148281


RESULT 62
ADP75188
ID   ADP75188 standard; DNA; 276820 BP.
XX
AC   ADP75188;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Human ADAMTS2 gene.
XX
KW   Human; chromosome 5; ds; gene; ADAM19; Endophilin 1; Endophilin 2; NRG2;
KW   ADAMTS2; a disintegrin and metalloprotease; neuroregulin 2; SNP;
KW   single nucleotide polymorphism;
KW   a disintegrin and metalloprotease with thrombospondin type1 motif 2;
KW   asthma; atopy; obesity; inflammatory bowel disease; respiratory disorder.
XX
OS   Homo sapiens.
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(225340,G)
FT                   /*tag= av
FT                   /standard_name= "Single nucleotide polymorphism"
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FT   variation       replace(225397,A)
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(229644,T)
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(237321,T)
FT                   /*tag= ba
FT                   /standard_name= "Single nucleotide polymorphism"
XX
PN   WO2003031594-A2.
XX
PD   17-APR-2003.
XX
PF   11-OCT-2002; 2002WO-US032700.
XX
PR   11-OCT-2001; 2001US-0328424P.
XX
PA   (GENO-) GENOME THERAPEUTICS CORP.
XX
PI   Keith T,  Little RD,  Van Eerdewegh P,  Dupuis J,  Del Mastro RG;
PI   Allen K;
XX
DR   WPI; 2003-381712/36.
XX
PT   New isolated nucleic acid or alternate splice variant, useful for
PT   diagnosing and treating a disintegrin and metalloprotease (ADAM) or
PT   interactor gene-associated disorder, e.g. asthma, atopy, obesity or
PT   inflammatory bowel disease.
XX
PS   Claim 2; SEQ ID NO 9; 338pp; English.
XX
CC   The invention relates to an isolated nucleic acid or alternate splice

  Query Match             1.6%;  Score 50;  DB 11;  Length 276820;
  Best Local Similarity   100.0%;  Pred. No. 1.2e-12;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db     194263 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 194312


RESULT 63
AAK77204/c
ID   AAK77204 standard; DNA; 95 BP.
XX
AC   AAK77204;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:32016.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
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XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-483426/52.
XX
PT   Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS   Disclosure; SEQ ID NO 32016; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting the
CC   nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 95 BP; 22 A; 14 C; 16 G; 43 T; 0 U; 0 Other;

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ID   AAK77203 standard; DNA; 95 BP.
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AC   AAK77203;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:32015.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
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PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 32015; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 95 BP; 22 A; 14 C; 16 G; 43 T; 0 U; 0 Other;

Query Match 1.6%; Score 49; DB 4; Length 95;
Best Local Similarity 100.0%; Pred. No. 4.7e-12;

```
  Matches   49;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db         90 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 42


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ID   AAK86736 standard; DNA; 272 BP.
XX
AC   AAK86736;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:41548.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
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XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 41548; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 272 BP; 45 A; 77 C; 67 G; 83 T; 0 U; 0 Other;

Query Match 1.6%; Score 49; DB 4; Length 272;
Best Local Similarity 100.0%; Pred. No. 4.5e-12;
Matches 49; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 3121
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RESULT 66
AAK86737/c
ID AAK86737 standard; DNA; 281 BP.
XX
AC AAK86737;
XX
DT 07-NOV-2001 (first entry)
XX
DE Human immune/haematopoietic antigen genomic sequence SEQ ID NO:41549.
XX
KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS Homo sapiens.

XX
PN WO200157182-A2.
XX
PD 09-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001354.
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PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
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PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 41549; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 281 BP; 48 A; 79 C; 70 G; 84 T; 0 U; 0 Other;

Query Match 1.6%; Score 49; DB 4; Length 281;
Best Local Similarity 100.0%; Pred. No. 4.5e-12;
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XX
AC AAK66626;
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DT 06-NOV-2001 (first entry)
XX
DE Human immune/haematopoietic antigen genomic sequence SEQ ID NO:21438.
XX
KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS Homo sapiens.
XX
PN WO200157182-A2.
XX
PD 09-AUG-2001.
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PF 17-JAN-2001; 2001WO-US001354.
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XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 21438; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,

```
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 21477 BP; 5311 A; 4999 C; 5256 G; 5911 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 49;  DB 4;  Length 21477;
  Best Local Similarity   100.0%;  Pred. No. 3.9e-12;
  Matches   49;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 3121
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Db      13201 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 13249


RESULT 68
ADZ13418/c
ID   ADZ13418 standard; DNA; 85920 BP.
XX
AC   ADZ13418;
XX
DT   16-JUN-2005  (first entry)
XX
DE   Human cancer-associated genomic DNA #80.
XX
KW   Diagnosis; DNA microarray; microarray; biochip; cancer; neoplasm;
KW   cytostatic; gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO2005031001-A2.
XX
PD   07-APR-2005.
XX
PF   23-SEP-2004; 2004WO-US031617.
XX
PR   23-SEP-2003; 2003US-00669920.
XX
PA   (CHIR ) CHIRON CORP.
XX
PI   Morris DW,  Malandro MS;
XX
DR   WPI; 2005-273395/28.
XX
PT   Nucleic acid array useful for detecting cancer associated nucleic acid,
PT   comprises two or more nucleic acid probes.
XX
PS   Disclosure; SEQ ID NO 938; 198pp; English.
XX
CC   The invention relates to a nucleic acid array for detecting a cancer
CC   associated (CA) nucleic acid, comprising two or more nucleic acid probes.
CC   The invention also relates to a peptide array comprising two or more
CC   isolated polypeptides encoded by a CA nucleic acid sequence, a compound
CC   that binds to a polypeptide, an isolated antibody or its fragment which
CC   binds to a polypeptide, which is prepared by immunizing a host animal
CC   with a composition comprising the polypeptide or its antigen binding
CC   fragment and collecting cells from the host expressing antibodies against
CC   the antigen or its antigen binding fragment, a composition comprising the
CC   antibody and a carrier, a method of screening for anticancer activity, a
CC   method of detecting a CA nucleic acid, a method of diagnosing cancer, a
CC   method of treating cancer and a method of inhibiting expression of a CA
CC   nucleic acid in a cell. The CA nucleic acids are useful for detecting CA
CC   nucleic acids. The antibody is useful for detecting the presence or
CC   absence of cancer cells in an individual which involves contacting cells
CC   from the individual with the antibody and detecting a complex of a CA
CC   protein from the cancer cells and the antibody, where the detection of
CC   the complex correlates with the presence of cancer cells in the
CC   individual. The composition is useful for inhibiting growth of cancer
CC   cells in an individual or for delivering a therapeutic agent to cancer
CC   cells in an individual. The invention is also useful for diagnosing
CC   cancer, for treating cancer and for inhibiting expression of a CA gene in
CC   a cell. This sequence represents human cancer-associated genomic DNA of
CC   the invention.
XX
SQ   Sequence 85920 BP; 23268 A; 18962 C; 19343 G; 24347 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 49;  DB 14;  Length 85920;
  Best Local Similarity   100.0%;  Pred. No. 3.7e-12;
  Matches   49;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 3121
             |||||||||||||||||||||||||||||||||||||||||||||||||
Db      45176 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 45128


RESULT 69
ADF51132/c
ID   ADF51132 standard; DNA; 243428 BP.
XX
AC   ADF51132;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Human P-Rex1 genomic DNA sequence.
XX
KW   human; P-Rex1; Rac; guanine-nucleotide exchange factor; GEF; GTPase;
KW   inflammation; metastasis; septic shock; neurodegeneration;
KW   atherosclerosis; antiinflammatory; cytostatic; antibacterial;
KW   immunosuppressive; neuroprotective; antiarteriosclerotic; gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003080664-A1.
XX
PD   02-OCT-2003.
XX
PF   21-MAR-2003; 2003WO-GB001238.
XX
PR   21-MAR-2002; 2002GB-00006684.
XX
PA   (BABR-) BABRAHAM INST.
XX
PI   Stephens L,  Hawkins PT;
XX
DR   WPI; 2004-011515/01.
DR   P-PSDB; ADF51119.
XX
PT   New isolated P-Rex1 protein or its derivative useful for discovering
PT   drugs capable of reducing or inhibiting inflammation, metastasis, septic
PT   shock, neurodegeneration or atherosclerosis, or for identifying P-Rex1
PT   modulators.
XX
PS   Disclosure; SEQ ID NO 14; 198pp; English.
XX
CC   This invention relates to a novel protein useful as an anti-inflammatory
CC   target. Specifically, it refers to the guanine-nucleotide exchange factor
CC   (GEF) named P-Rex1, which has also been identified as a
CC   phosphatidylinositol(3,4,5)P3-sensitive activator of Rac (a monomeric
CC   GTPase). Accordingly, P-Rex1 can be described as having Rac-GEF activity
CC   and is adapted to function downstream of activation of heterotrimeric G
CC   proteins in neutrophils. The present invention describes this protein as
CC   a useful target for drug discovery or for discovery of a drug capable of
CC   reducing or inhibiting inflammation, metastasis, septic shock,
CC   neurodegeneration or atherosclerosis. As such, P-Rex1 can have various
CC   activities including antiinflammatory, cytostatic, antibacterial,
CC   immunosuppressive, neuroprotective and antiarteriosclerotic. Furthermore,
CC   the protein or its mutant, the nucleic acid or appropriate antibody may
CC   be used in a screening assay to identify a modulator of P-Rex1 binding,
CC   activity or expression. This polynucleotide is the human P-Rex1 genomic
CC   DNA sequence of the invention.
XX
SQ   Sequence 243428 BP; 65880 A; 63219 C; 59010 G; 55319 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 49;  DB 12;  Length 243428;
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  Best Local Similarity   100.0%;  Pred. No. 3.6e-12;
  Matches   49;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3074 GATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db     235339 GATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 235291


RESULT 70
AAK82458/c
ID   AAK82458 standard; DNA; 4316 BP.
XX
AC   AAK82458;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:37270.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
PR   16-MAR-2000; 2000US-0189874P.
PR   17-MAR-2000; 2000US-0190076P.
PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
PR   14-JUL-2000; 2000US-0218290P.
PR   26-JUL-2000; 2000US-0220963P.
PR   26-JUL-2000; 2000US-0220964P.
PR   14-AUG-2000; 2000US-0224518P.
PR   14-AUG-2000; 2000US-0224519P.
PR   14-AUG-2000; 2000US-0225213P.
PR   14-AUG-2000; 2000US-0225214P.
PR   14-AUG-2000; 2000US-0225266P.
PR   14-AUG-2000; 2000US-0225267P.
PR   14-AUG-2000; 2000US-0225268P.
PR   14-AUG-2000; 2000US-0225270P.
PR   14-AUG-2000; 2000US-0225447P.
PR   14-AUG-2000; 2000US-0225757P.
PR   14-AUG-2000; 2000US-0225758P.
PR   14-AUG-2000; 2000US-0225759P.
PR   18-AUG-2000; 2000US-0226279P.
PR   22-AUG-2000; 2000US-0226681P.
PR   22-AUG-2000; 2000US-0226868P.
PR   22-AUG-2000; 2000US-0227182P.
PR   23-AUG-2000; 2000US-0227009P.
PR   30-AUG-2000; 2000US-0228924P.
PR   01-SEP-2000; 2000US-0229287P.
PR   01-SEP-2000; 2000US-0229343P.
PR   01-SEP-2000; 2000US-0229344P.
PR   01-SEP-2000; 2000US-0229345P.
PR   05-SEP-2000; 2000US-0229509P.
PR   05-SEP-2000; 2000US-0229513P.
PR   06-SEP-2000; 2000US-0230437P.
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PR   08-SEP-2000; 2000US-0231242P.
PR   08-SEP-2000; 2000US-0231243P.
PR   08-SEP-2000; 2000US-0231244P.
PR   08-SEP-2000; 2000US-0231413P.
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PR   08-SEP-2000; 2000US-0232080P.
PR   08-SEP-2000; 2000US-0232081P.
PR   12-SEP-2000; 2000US-0231968P.
PR   14-SEP-2000; 2000US-0232397P.
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PR   14-SEP-2000; 2000US-0233063P.
PR   14-SEP-2000; 2000US-0233064P.
PR   14-SEP-2000; 2000US-0233065P.
PR   21-SEP-2000; 2000US-0234223P.
PR   21-SEP-2000; 2000US-0234274P.
PR   25-SEP-2000; 2000US-0234997P.
PR   25-SEP-2000; 2000US-0234998P.
PR   26-SEP-2000; 2000US-0235484P.
PR   27-SEP-2000; 2000US-0235834P.
PR   27-SEP-2000; 2000US-0235836P.
PR   29-SEP-2000; 2000US-0236327P.
PR   29-SEP-2000; 2000US-0236367P.
PR   29-SEP-2000; 2000US-0236368P.
PR   29-SEP-2000; 2000US-0236369P.
PR   29-SEP-2000; 2000US-0236370P.
PR   02-OCT-2000; 2000US-0236802P.
PR   02-OCT-2000; 2000US-0237037P.
PR   02-OCT-2000; 2000US-0237038P.
PR   02-OCT-2000; 2000US-0237039P.
PR   02-OCT-2000; 2000US-0237040P.
PR   13-OCT-2000; 2000US-0239935P.
PR   13-OCT-2000; 2000US-0239937P.
PR   20-OCT-2000; 2000US-0240960P.
PR   20-OCT-2000; 2000US-0241221P.
PR   20-OCT-2000; 2000US-0241785P.
PR   20-OCT-2000; 2000US-0241786P.
PR   20-OCT-2000; 2000US-0241787P.
PR   20-OCT-2000; 2000US-0241808P.
PR   20-OCT-2000; 2000US-0241809P.
PR   20-OCT-2000; 2000US-0241826P.
PR   01-NOV-2000; 2000US-0244617P.
PR   08-NOV-2000; 2000US-0246474P.
PR   08-NOV-2000; 2000US-0246475P.
PR   08-NOV-2000; 2000US-0246476P.
PR   08-NOV-2000; 2000US-0246477P.
PR   08-NOV-2000; 2000US-0246478P.
PR   08-NOV-2000; 2000US-0246523P.
PR   08-NOV-2000; 2000US-0246524P.
PR   08-NOV-2000; 2000US-0246525P.
PR   08-NOV-2000; 2000US-0246526P.
PR   08-NOV-2000; 2000US-0246527P.
PR   08-NOV-2000; 2000US-0246528P.
PR   08-NOV-2000; 2000US-0246532P.
PR   08-NOV-2000; 2000US-0246609P.
PR   08-NOV-2000; 2000US-0246610P.
PR   08-NOV-2000; 2000US-0246611P.
PR   08-NOV-2000; 2000US-0246613P.
PR   17-NOV-2000; 2000US-0249207P.
PR   17-NOV-2000; 2000US-0249208P.
PR   17-NOV-2000; 2000US-0249209P.
PR   17-NOV-2000; 2000US-0249210P.
PR   17-NOV-2000; 2000US-0249211P.
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PR   17-NOV-2000; 2000US-0249213P.
PR   17-NOV-2000; 2000US-0249214P.
PR   17-NOV-2000; 2000US-0249215P.
PR   17-NOV-2000; 2000US-0249216P.
PR   17-NOV-2000; 2000US-0249217P.
PR   17-NOV-2000; 2000US-0249218P.
PR   17-NOV-2000; 2000US-0249244P.
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PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 37270; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 4316 BP; 1270 A; 791 C; 832 G; 1423 T; 0 U; 0 Other;

Query Match 1.5%; Score 48; DB 4; Length 4316;
Best Local Similarity 100.0%; Pred. No. 1.2e-11;
Matches 48; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3075 ATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db 372 ATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 325

RESULT 71
AAK82461/c
ID AAK82461 standard; DNA; 4316 BP.
XX
AC AAK82461;
XX
DT 07-NOV-2001 (first entry)
XX
DE Human immune/haematopoietic antigen genomic sequence SEQ ID NO:37273.
XX
KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS Homo sapiens.
XX
PN WO200157182-A2.
XX
PD 09-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001354.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
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PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
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PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.

PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
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PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
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PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
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PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
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PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 37273; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 4316 BP; 1270 A; 791 C; 832 G; 1423 T; 0 U; 0 Other;

Query Match 1.5%; Score 48; DB 4; Length 4316;
Best Local Similarity 100.0%; Pred. No. 1.2e-11;
Matches 48; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3075 ATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
||||||||||||||||||||||||||||||||||||||||||||||||
Db 372 ATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 325

RESULT 72
AAK82456/c
ID AAK82456 standard; DNA; 4317 BP.
XX
AC AAK82456;
XX
DT 07-NOV-2001 (first entry)
XX
DE Human immune/haematopoietic antigen genomic sequence SEQ ID NO:37268.
XX
KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS Homo sapiens.
XX
PN WO200157182-A2.
XX
PD 09-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001354.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.

PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 37268; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the

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CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 4317 BP; 1270 A; 791 C; 831 G; 1425 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 48;  DB 4;  Length 4317;
  Best Local Similarity   100.0%;  Pred. No. 1.2e-11;
  Matches   48;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3075 ATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             ||||||||||||||||||||||||||||||||||||||||||||||||
Db        372 ATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 325


RESULT 73
ADA02666
ID   ADA02666 standard; DNA; 52242 BP.
XX
AC   ADA02666;
XX
DT   06-NOV-2003  (first entry)
XX
DE   Human MDM2 carcinoma associated gene, SEQ ID NO:1184.
XX
KW   Human; carcinoma associated; oncogene; carcinoma; cancer; breast;
KW   prostate; lymphoma; leukaemia; cytostatic; gene therapy; drug screening;
KW   gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003057146-A2.
XX
PD   17-JUL-2003.
XX
PF   26-DEC-2002; 2002WO-US041414.
XX
PR   26-DEC-2001; 2001US-00035832.
XX
PA   (SAGR-) SAGRES DISCOVERY.
XX
PI   Morris DW;
XX
DR   WPI; 2003-587068/55.
XX
PT   New recombinant nucleic acid encoding carcinoma associated protein,
PT   useful for preparing compositions for treating carcinomas.
XX
PS   Claim 1; SEQ ID NO 1184; 245pp; English.
XX
CC   The invention relates to recombinant carcinoma associated (CA) nucleic
CC   acid sequences from mouse and human (ADA01482-ADA03094), and to
CC   recombinant carcinoma associated proteins (CAP) encoded by them. The
CC   invention also encompasses expression vectors and host cells comprising a
CC   CA nucleic acid, a polypeptide (especially an antibody) that specifically
CC   binds to the protein, and a biochip comprising CA nucleic acid or
CC   fragments thereof. The sequences of the invention were identified using
CC   oncogenic retroviruses, which insert into the genome of the host organism
CC   at random. Many of these do not carry transduced host oncogenes or
CC   pathogenic trans-acting viral genes, meaning that cancer incidence is a
CC   direct consequence of the effects of proviral integration into host
CC   protooncogenes. The CA nucleic acid sequences can be used to diagnose
CC   carcinoma (especially breast cancer, prostate cancer, lymphoma or
CC   leukaemia) or a propensity to carcinoma by determination of the sequence
CC   of a CA gene, or by determination of CA gene expression in particular
CC   tissues. CA nucleic acids, proteins and antibodies are also useful as
CC   therapeutic agents and in screening and evaluating drug candidates. The
CC   present sequence represents a specifically claimed human CA nucleic acid
CC   sequence of the invention. Note: The complete sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 52242 BP; 14384 A; 10354 C; 10997 G; 16487 T; 0 U; 20 Other;

  Query Match             1.5%;  Score 48;  DB 9;  Length 52242;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-11;
  Matches   48;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 2942
             ||||||||||||||||||||||||||||||||||||||||||||||||
Db       5520 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 5567


RESULT 74
ADB72404
ID   ADB72404 standard; DNA; 52242 BP.
XX
AC   ADB72404;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human MDM2 gene.
XX
KW   human; ds; cytostatic; gene therapy; vaccine; carcinoma; lymphomas;
KW   cancer; neoplasm; adenocarcinoma; sarcoma; gene.
XX
OS   Homo sapiens.
XX
PN   WO2003008583-A2.
XX
PD   30-JAN-2003.
XX
PF   26-DEC-2001; 2001WO-US051291.
XX
PR   02-MAR-2001; 2001US-00798586.
PR   23-OCT-2001; 2001US-00004113.
PR   08-NOV-2001; 2001US-00052482.
PR   30-NOV-2001; 2001US-00997722.
PR   20-DEC-2001; 2001US-00034650.
XX
PA   (SAGR-) SAGRES DISCOVERY.
XX
PI   Morris DW,  Engelhard EK;
XX
DR   WPI; 2003-239337/23.
XX
PT   New recombinant nucleic acid, useful for treating carcinomas, lymphomas,
PT   cancers, neoplasm, adenocarcinoma, or sarcomas.
XX
PS   Claim 1; SEQ ID NO 232; 2304pp; English.
XX
CC   The invention relates to a novel recombinant nucleic acid comprising a
CC   nucleotide sequence selected from any of the 660 sequences fully defined
CC   in the specification. A polynucleotide of the invention has cytostatic
CC   activity, and may have a use in gene therapy, or in a vaccine. The
CC   recombinant nucleic acids and polypeptides are useful for treating
CC   carcinomas, e.g. lymphomas, cancers, neoplasm, adenocarcinoma, and
CC   sarcomas. The present sequence represents a human gene of the invention.
XX
SQ   Sequence 52242 BP; 14384 A; 10354 C; 10997 G; 16487 T; 0 U; 20 Other;

  Query Match             1.5%;  Score 48;  DB 10;  Length 52242;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-11;
  Matches   48;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 2942
             ||||||||||||||||||||||||||||||||||||||||||||||||
Db       5520 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 5567


RESULT 75
ADE95914
```

ID ADE95914 standard; DNA; 52242 BP.
XX
AC ADE95914;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human MDM2 gene genomic DNA sequence.
XX
KW cancer diagnosis; cancer treatment; carcinoma; cytostatic; gene therapy;
KW lymphoma; breast cancer; prostate cancer; leukaemia; ds; human; MDM2.
XX
OS Homo sapiens.
XX
PN WO2003039484-A2.
XX
PD 15-MAY-2003.
XX
PF 08-NOV-2002; 2002WO-US036071.
XX
PR 08-NOV-2001; 2001US-00052482.
XX
PA (SAGR-) SAGRES DISCOVERY.
XX
PI Morris DW, Engelhard EK;
XX
DR WPI; 2003-441462/41.
XX
PT New carcinoma associated nucleic acids and proteins, useful for screening
PT drug candidates, or for diagnosing and treating carcinomas, e.g.
PT lymphoma, breast cancer, prostate cancer or leukemia.
XX
PS Claim 1; SEQ ID NO 172; 793pp; English.
XX
CC This invention relates to novel recombinant nucleic acids for use in
CC diagnosis and treatment of cancer, especially carcinomas, as well as the
CC use of compositions in screening methods. The compositions of the
CC invention may have cytostatic activity whilst the disclosed sequences may
CC be useful for gene therapy. The carcinoma associated nucleic acids and
CC proteins are useful for diagnosing and treating carcinomas, for example
CC lymphoma, breast cancer, prostate cancer or leukaemia, or for screening
CC drug candidates or bioactive agents capable of binding to, or modulating
CC the activity of, a carcinoma associated protein. The present sequence is
CC the genomic DNA sequence of the human MDM2 gene which is a carcinoma
CC associated gene of the invention.
XX
SQ Sequence 52242 BP; 14384 A; 10353 C; 10998 G; 16487 T; 0 U; 20 Other;

Query Match 1.5%; Score 48; DB 10; Length 52242;
Best Local Similarity 100.0%; Pred. No. 1.1e-11;
Matches 48; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 2942
||||||||||||||||||||||||||||||||||||||||||||||||
Db 5520 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 5567

RESULT 76
AEA61175/c
ID AEA61175 standard; DNA; 53779 BP.
XX
AC AEA61175;
XX
DT 25-AUG-2005 (first entry)
XX
DE Human ENTPD5 gene genomic sequence SEQ ID NO:85.
XX
KW DNA methylation; biomarker; cancer; gene; ds; ENTPD5.
XX
OS Homo sapiens.
XX
PN US2005130172-A1.
XX
PD 16-JUN-2005.
XX
PF 27-JAN-2004; 2004US-00765790.
XX
PR 16-DEC-2003; 2003US-00737082.
XX
PA (FARB) BAYER CORP.
XX
PI Beard C, Burgess C, Gannon A, Harvey J, Lechner JF, Li Z;
XX
DR WPI; 2005-456991/46.
DR GENBANK; NM_001249.
XX
PT Identifying nucleic acid sequences as biomarker for disease, by
PT identifying nucleic acid sequences comprising methylated CpG site and
PT down-regulated in diseased cells and comparing its expression level with
PT demethylated nucleic acid.
XX
PS Claim 11; SEQ ID NO 85; 27pp; English.
XX
CC The invention relates to a method (M1) for identifying one or more
CC nucleic acid sequences useful as a biomarker for a disease to be
CC detected. (M1) involves identifying nucleic acid sequences comprising
CC methylated CpG site in promoter-first exon region and that are down-
CC regulated in diseased cells, comparing expression level of nucleic acid
CC sequences with that of demethylated nucleic acid sequences and
CC identifying nucleic acid sequences exhibiting increase in expression
CC after demethylation. Also described: (1) detecting (M2) the presence or
CC stage of a disease in a subject, which involves determining the degree of
CC methylation of one or more CpG sites on nucleic acid sequences in a
CC biological sample obtained from the subject, and determining the presence
CC of, predisposition to, or stage of the disease in the subject based on
CC the degree of methylation; (2) monitoring the onset, progression, or
CC regression of a disease in a subject; (3) determining the efficacy of a
CC test compound for inhibiting a disease in a subject; and (4) a kit (I)
CC useful for diagnosis, prognosis, staging, monitoring, and therapeutic
CC treatment of a disease. (M1) is useful for identifying one or more
CC nucleic acid sequences useful as a biomarker for a disease to be
CC detected, where the nucleic acid sequences are useful for detecting, the
CC presence or stage of a disease such as cancer e.g. colorectal cancer in a
CC subject. The present sequence represents a specifically claimed human
CC genomic sequence for use in the method of the invention. Note - The
CC sequence data for this patent is not represented in the printed
CC specification but was obtained in electronic format from the USPTO web
CC site.
XX
SQ Sequence 53779 BP; 14286 A; 11767 C; 12248 G; 15478 T; 0 U; 0 Other;

Query Match 1.5%; Score 48; DB 14; Length 53779;
Best Local Similarity 100.0%; Pred. No. 1.1e-11;
Matches 48; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2889 GAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCA 2936
||||||||||||||||||||||||||||||||||||||||||||||||
Db 2311 GAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCA 2264

RESULT 77
ACN44374
ID ACN44374 standard; DNA; 181684 BP.
XX
AC ACN44374;
XX
DT 18-NOV-2004 (first entry)
XX
DE Human genomic sequence hCG16651.
XX
KW Cytostatic; carcinoma; lymphoma; cancer; human; gene; ss.
XX
OS Homo sapiens.
XX
PN WO2003073826-A2.
XX
PD 12-SEP-2003.

```
XX
PF   28-FEB-2003; 2003WO-US006235.
XX
PR   01-MAR-2002; 2002US-00087192.
XX
PA   (SAGR-) SAGRES DISCOVERY.
XX
PI   Morris DW;
XX
DR   WPI; 2003-328604/31.
XX
PT   Recombinant nucleic acid useful for diagnosis and treatment of carcinoma
PT   comprises a nucleotide sequence.
XX
PS   Claim 1; SEQ ID NO 790; 0pp; English.
XX
CC   The present invention relates to novel DNA and protein sequences which
CC   are associated with carcinomas. The sequences are useful for: (i) for
CC   screening drug candidates; (ii) for screening of bioactive agent capable
CC   of binding to Carcinoma Associated Protein (CAP); (iii) for screening of
CC   a bioactive agent capable of modulating the activity of CAP; (iv) for
CC   evaluating the effect of a candidate carcinoma drug; (v) for diagnosing
CC   carcinoma; (vi) for inhibiting the activity of CAP; (vii) for treating
CC   carcinoma; (viii) for neutralizing the effect of CAP; (ix) as a biochip;
CC   (x) for diagnosing carcinoma or a propensity to carcinoma; and (xi) for
CC   determining Carcinoma Associated (CA) gene copy number. In addition, the
CC   CA genes are useful as DNA vaccines and the CAP are useful as markers of
CC   carcinoma including lymphoma. The present sequence is one such CA coding
CC   sequence. Note: This patent is an equivalent to basic patent
CC   US2002182586A1, for which no sequence data was published
XX
SQ   Sequence 181684 BP; 55185 A; 34753 C; 35001 G; 55847 T; 0 U; 898 Other;

  Query Match             1.5%;  Score 48;  DB 11;  Length 181684;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-11;
  Matches   48;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTC 3120
             ||||||||||||||||||||||||||||||||||||||||||||||||
Db     155726 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTC 155773


RESULT 78
ABV16331
ID   ABV16331 standard; cDNA; 440 BP.
XX
AC   ABV16331;
XX
DT   13-SEP-2002  (first entry)
XX
DE   Human prostate expression marker cDNA 16322.
XX
KW   Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW   pharmacogenomic marker; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200160860-A2.
XX
PD   23-AUG-2001.
XX
PF   20-FEB-2001; 2001WO-US005171.
XX
PR   17-FEB-2000; 2000US-0183319P.
PR   16-MAR-2000; 2000US-0189862P.
PR   25-MAY-2000; 2000US-0207454P.
PR   09-JUN-2000; 2000US-0211314P.
PR   18-JUL-2000; 2000US-0219007P.
PR   13-DEC-2000; 2000US-0255281P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Schlegel R,  Endege WO,  Monahan JE;
XX
DR   WPI; 2001-662795/76.
XX
PT   Novel isolated nucleic acid molecule associated with cancerous state of
PT   prostate cells and correlating with presence of prostate cancer, useful
PT   for detecting presence of prostate cancer, stage of prostate cancer.
XX
PS   Claim 1; Page 2728; 11750pp; English.
XX
CC   The invention relates to an isolated nucleic acid molecule (I) comprising
CC   a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC   specification or its complement. (I) is useful for: (a) assessing whether
CC   a patient is afflicted with prostate cancer; (b) monitoring the
CC   progression of prostate cancer in a patient; (c) assessing the efficacy
CC   of a test compound to inhibit prostate cancer in a patient; (d) assessing
CC   the efficacy of a therapy for inhibiting prostate cancer in a patient;
CC   (e) selecting a composition for inhibiting prostate cancer in a patient;
CC   (f) assessing the prostate cell carcinogenic potential of a compound; (g)
CC   determining whether prostate cancer has metastasized in a patient; (h)
CC   assessing the aggressiveness or indolence of prostate cancer in a patient
CC   ; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker
XX
SQ   Sequence 440 BP; 136 A; 96 C; 112 G; 96 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 47;  DB 5;  Length 440;
  Best Local Similarity   100.0%;  Pred. No. 3.8e-11;
  Matches   47;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3070 GCAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||||
Db        378 GCAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 424


RESULT 79
ABV46129
ID   ABV46129 standard; cDNA; 516 BP.
XX
AC   ABV46129;
XX
DT   16-SEP-2002  (first entry)
XX
DE   Human prostate expression marker cDNA 46120.
XX
KW   Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW   pharmacogenomic marker; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200160860-A2.
XX
PD   23-AUG-2001.
XX
PF   20-FEB-2001; 2001WO-US005171.
XX
PR   17-FEB-2000; 2000US-0183319P.
PR   16-MAR-2000; 2000US-0189862P.
PR   25-MAY-2000; 2000US-0207454P.
PR   09-JUN-2000; 2000US-0211314P.
PR   18-JUL-2000; 2000US-0219007P.
PR   13-DEC-2000; 2000US-0255281P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Schlegel R,  Endege WO,  Monahan JE;
XX
DR   WPI; 2001-662795/76.
XX
PT   Novel isolated nucleic acid molecule associated with cancerous state of
PT   prostate cells and correlating with presence of prostate cancer, useful
PT   for detecting presence of prostate cancer, stage of prostate cancer.
XX
PS   Claim 1; Page 9110; 11750pp; English.
XX
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```
CC   The invention relates to an isolated nucleic acid molecule (I) comprising
CC   a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC   specification or its complement. (I) is useful for: (a) assessing whether
CC   a patient is afflicted with prostate cancer; (b) monitoring the
CC   progression of prostate cancer in a patient; (c) assessing the efficacy
CC   of a test compound to inhibit prostate cancer in a patient; (d) assessing
CC   the efficacy of a therapy for inhibiting prostate cancer in a patient;
CC   (e) selecting a composition for inhibiting prostate cancer in a patient;
CC   (f) assessing the prostate cell carcinogenic potential of a compound; (g)
CC   determining whether prostate cancer has metastasized in a patient; (h)
CC   assessing the aggressiveness or indolence of prostate cancer in a patient
CC   ; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker
XX
SQ   Sequence 516 BP; 161 A; 118 C; 135 G; 100 T; 0 U; 2 Other;

  Query Match             1.5%;  Score 47;  DB 5;  Length 516;
  Best Local Similarity   100.0%;  Pred. No. 3.8e-11;
  Matches   47;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3070 GCAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||||
Db        418 GCAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 464


RESULT 80
ADL13941
ID   ADL13941 standard; DNA; 125515 BP.
XX
AC   ADL13941;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Osteoarthritis-associated polymorphic nucleotide #473.
XX
KW   ds; gene; osteopathic; antiinflammatory; antiarthritic; gene therapy;
KW   joint space narrowing; osteophyte development; joint pain;
KW   osteoarthritis; SNP; single nucleotide polymorphism.
XX
OS   Homo sapiens.
XX
PN   WO2003054166-A2.
XX
PD   03-JUL-2003.
XX
PF   19-DEC-2002; 2002WO-US041225.
XX
PR   20-DEC-2001; 2001US-0342603P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Jones KA,  Schafer A;
XX
DR   WPI; 2003-559141/52.
XX
PT   Determining susceptibility of an individual to joint space narrowing,
PT   osteophyte development and/or joint pain comprises identifying whether
PT   the individual has at least one polymorphism in a polynucleotide encoding
PT   a protein.
XX
PS   Disclosure; SEQ ID NO 473; 297pp; English.
XX
CC   The invention relates to a method of determining susceptibility of an
CC   individual to joint space narrowing and/or osteophyte development and/or
CC   joint pain comprising identifying whether the individual has at least one
CC   polymorphism in a polynucleotide encoding at least one of the protein
CC   listed in the specification. The methods, composition and agent are
CC   useful for modulating the susceptibility of an individual to joint space
CC   narrowing and/or osteophyte development and/or joint pain that is
CC   associated with a disease, preferably osteoarthritis. The cell line and
CC   the non-human animal are useful for screening for an agent for diagnosing
CC   an individual having susceptibility to joint space narrowing and/or
CC   osteophyte development and/or joint pain. This sequence corresponds to
CC   the polynucleotide encoding a protein listed in the specification. (Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification but was obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences).
XX
SQ   Sequence 125515 BP; 33180 A; 28822 C; 28744 G; 34769 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 47;  DB 10;  Length 125515;
  Best Local Similarity   100.0%;  Pred. No. 3.2e-11;
  Matches   47;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3076 TTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             |||||||||||||||||||||||||||||||||||||||||||||||
Db      77293 TTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 77339


RESULT 81
ADW06065/c
ID   ADW06065 standard; DNA; 380 BP.
XX
AC   ADW06065;
XX
DT   24-MAR-2005  (first entry)
XX
DE   Human gene trapped sequence (GTS) - SEQ ID 282.
XX
KW   gene expression; forensic; aging; cancer; autoimmune disease;
KW   systemic lupus erythematosus; scleroderma; crohns disease;
KW   multiple sclerosis; inflammatory bowel disease; immune disorder;
KW   schizophrenia; psychosis; alopecia; inflammatory disorder;
KW   ataxia telangiectasia; diabetes; skin disorder; osteoarthritis;
KW   rheumatoid arthritis; blood pressure; atherosclerosis;
KW   cardiovascular disease; pulmonary disease; Alzheimers disease;
KW   Parkinsons disease; osteoporosis; asthma; developmental disorder;
KW   infertility; infection; cytostatic; immunosuppressive; dermatological;
KW   antiinflammatory; neuroprotective; gastrointestinal-gen.;
KW   neuroleptic endocrine-gen.; antidiabetic; antiarthritic; osteopathic;
KW   antirheumatic; antiarteriosclerotic; cardiovascular-gen.; nootropic;
KW   antiparkinsonian; antiasthmatic; antiinfertility; gene trapped sequence;
KW   GTS; ds.
XX
OS   Homo sapiens.
XX
PN   US2005003444-A1.
XX
PD   06-JAN-2005.
XX
PF   06-AUG-2004; 2004US-00914037.
XX
PR   30-OCT-1998;   98US-0106442P.
PR   27-OCT-1999;   99US-00428674.
XX
PA   (LEXI-) LEXICON GENETICS INC.
XX
PI   Nehls M,  Zambrowicz B,  Sands AT;
XX
DR   WPI; 2005-065239/07.
XX
PT   New human gene trapped sequences, useful for diagnosing and treating
PT   disorders affecting development and cell differentiation, e.g. aging,
PT   cancer, schizophrenia, alopecia, diabetes, rheumatoid arthritis, or
PT   infertility.
XX
PS   Claim 3; SEQ ID NO 282; 35pp; English.
XX
CC   The invention comprises novel human gene trapped sequences (GTSs) which
CC   are useful in gene discovery and as markers for gene expression analysis,
CC   forensic analysis, and determining the genetic basis of human disease.
CC   The human GTSs of the invention are useful for diagnosing and treating
CC   disorders affecting development and cell differentiation, such as: aging,
CC   cancer, autoimmune disease, lupus, scleroderma, Crohn's disease, multiple
CC   sclerosis, inflammatory bowel disease, immune disorders, schizophrenia,
CC   psychosis, alopecia, glandular disorders, inflammatory disorders, ataxia
CC   telangiectasia, diabetes, skin disorders, osteoarthritis, rheumatoid
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CC   arthritis, high blood pressure, atherosclerosis, cardiovascular disease,
CC   pulmonary disease, degenerative disease of neural or skeletal systems,
CC   Alzheimer's disease, Parkinson's disease, osteoporosis, asthma,
CC   developmental disorders, genetic birth defects, infertility, epithelial
CC   ulcerations, and infections. The present nucleic acid represents a human
CC   GTS of the invention. NOTE: The present sequence is not shown in the
CC   specification, but has been retrieved from the USPTO web site.
XX
SQ   Sequence 380 BP; 93 A; 103 C; 78 G; 105 T; 0 U; 1 Other;

  Query Match             1.5%;  Score 46;  DB 14;  Length 380;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-10;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||
Db         49 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 4


RESULT 82
ABL83398/c
ID   ABL83398 standard; cDNA; 405 BP.
XX
AC   ABL83398;
XX
DT   17-MAY-2002  (first entry)
XX
DE   Human ovarian cancer related cDNA clone SEQ ID NO:6376.
XX
KW   Human; ovarian cancer; ovarian tumour; cytostatic; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192581-A2.
XX
PD   06-DEC-2001.
XX
PF   29-MAY-2001; 2001WO-US017756.
XX
PR   26-MAY-2000; 2000US-0207484P.
XX
PA   (CORI-) CORIXA CORP.
XX
PI   Algate PA,  Harlocker SL,  Jones R;
XX
DR   WPI; 2002-122075/16.
XX
PT   Composition for therapy and diagnosis of ovarian cancer comprising
PT   polypeptide of a ovarian tumor polypeptide, polynucleotide encoding
PT   polypeptide, antibody specific to polypeptide or T cell expressing
PT   polypeptide.
XX
PS   Claim 1; SEQ ID NO 6376; 489pp; English.
XX
CC   The present invention describes a composition (I) comprising: carriers
CC   and immunostimulants; and a polypeptide (II) of a ovarian tumour
CC   polypeptide encoded by a polynucleotide (III) having a cDNA sequence (S1)
CC   from the 10912 nucleotide sequences as given in ABL77023 to ABL87934,
CC   (III) encoding (II) having a sequence (S2), a T cell population of (II),
CC   or antigen presenting cells that express (II). (I) has cytostatic
CC   activity. An oligonucleotide (IV) that hybridises to (S1) can be used for
CC   detecting ovarian cancer in a patient's biological sample preferably
CC   serum or ovarian tissue. The method comprises contacting a biological
CC   sample from a patient with (IV), detecting the amount of polynucleotide
CC   hybridising to (IV) and comparing the amount to a predetermined cutoff
CC   value and thereby detecting ovarian cancer in the patient, where the
CC   amount of polynucleotide hybridising to (IV) is detected preferably by
CC   polymerase chain reaction (PCR). (I) comprising (III) and/or (II) is
CC   useful for stimulating and/or expanding T cells specific for an ovarian
CC   tumour protein comprising contacting T cells with (III) or (II). (III) is
CC   useful in design and preparation of ribozyme molecules for inhibiting
CC   expression of the tumour polypeptides and proteins in tumour cells; and
CC   to isolate a full length gene from a suitable library e.g., a tumour cDNA
CC   library using well known techniques
XX
SQ   Sequence 405 BP; 84 A; 114 C; 95 G; 112 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 46;  DB 6;  Length 405;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-10;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||
Db        106 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 61


RESULT 83
ADL43370/c
ID   ADL43370 standard; DNA; 458 BP.
XX
AC   ADL43370;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human ovarian cancer DNA marker #17260.
XX
KW   Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS   Homo sapiens.
XX
PN   WO200170979-A2.
XX
PD   27-SEP-2001.
XX
PF   21-MAR-2001; 2001WO-US009126.
XX
PR   21-MAR-2000; 2000US-0191031P.
PR   25-MAY-2000; 2000US-0207124P.
PR   15-JUN-2000; 2000US-0211940P.
PR   07-JUL-2000; 2000US-0216820P.
PR   25-JUL-2000; 2000US-0220661P.
PR   21-DEC-2000; 2000US-0257672P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lee J,  Lillie J;
XX
DR   WPI; 2001-611502/70.
XX
PT   Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT   cancer cells as compared to their normal non-cancerous ovarian cells are
PT   used to characterize stage, grade, histological type of ovarian cancer.
XX
PS   Disclosure; SEQ ID NO 17260; 106pp; English.
XX
CC   The invention relates to nucleic acid markers which are overexpressed in
CC   ovarian cancer cells as compared to their expression in normal (i.e. non-
CC   cancerous) ovarian cells. The invention also relates to polypeptides
CC   encoded by the markers, antibodies that selectively bind to the
CC   polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC   of developing ovarian cancer involving inhibiting expression of a gene
CC   corresponding to a marker of the invention and a method of treating a
CC   patient afflicted with ovarian cancer comprising providing to cells of
CC   the patient an antisense oligonucleotide complementary to a marker of the
CC   invention. The markers are useful for assessing if a patient is afflicted
CC   with ovarian cancer, which involves comparing the level of expression of
CC   a marker in a patient sample and a normal level of expression of the
CC   marker in a control non-ovarian cancer sample. A difference between the
CC   expression levels indicates ovarian cancer. The level of expression of a
CC   marker corresponds to a secreted protein or to a transcribed
CC   polynucleotide or its portion. The level of expression of the marker is
CC   assessed by detecting the presence in the sample, a protein or protein
CC   fragment corresponding to the marker. The presence of protein or protein
CC   fragment is detected using an antibody that specifically binds with the
CC   protein or protein fragment. Alternatively, the level of expression of
CC   the marker is assessed by detecting the presence of a transcribed
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CC   polynucleotide which anneals with the marker or anneals with a portion of
CC   the polynucleotide comprising the marker, under stringent conditions. The
CC   marker is also used for monitoring the progression of ovarian cancer in a
CC   patient which involves detecting expression of the marker in a patient
CC   sample at a first point in time, repeating the method at a subsequent
CC   time and comparing the level of expression. The method is carried out
CC   using an ovarian tissue sample. A composition comprising a marker,
CC   polypeptide or antibody of the invention is used to treat ovarian cancer.
CC   This sequence represents a human ovarian cancer DNA marker of the
CC   invention.
XX
SQ   Sequence 458 BP; 89 A; 124 C; 126 G; 119 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 46;  DB 5;  Length 458;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-10;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
             ||||||||||||||||||||||||||||||||||||||||||||||
Db        405 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 360


RESULT 84
ABV60535
ID   ABV60535 standard; cDNA; 497 BP.
XX
AC   ABV60535;
XX
DT   13-SEP-2002  (first entry)
XX
DE   Human prostate expression marker cDNA 60526.
XX
KW   Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW   pharmacogenomic marker; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200160860-A2.
XX
PD   23-AUG-2001.
XX
PF   20-FEB-2001; 2001WO-US005171.
XX
PR   17-FEB-2000; 2000US-0183319P.
PR   16-MAR-2000; 2000US-0189862P.
PR   25-MAY-2000; 2000US-0207454P.
PR   09-JUN-2000; 2000US-0211314P.
PR   18-JUL-2000; 2000US-0219007P.
PR   13-DEC-2000; 2000US-0255281P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Schlegel R,  Endege WO,  Monahan JE;
XX
DR   WPI; 2001-662795/76.
XX
PT   Novel isolated nucleic acid molecule associated with cancerous state of
PT   prostate cells and correlating with presence of prostate cancer, useful
PT   for detecting presence of prostate cancer, stage of prostate cancer.
XX
PS   Claim 1; Page 11527; 11750pp; English.
XX
CC   The invention relates to an isolated nucleic acid molecule (I) comprising
CC   a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC   specification or its complement. (I) is useful for: (a) assessing whether
CC   a patient is afflicted with prostate cancer; (b) monitoring the
CC   progression of prostate cancer in a patient; (c) assessing the efficacy
CC   of a test compound to inhibit prostate cancer in a patient; (d) assessing
CC   the efficacy of a therapy for inhibiting prostate cancer in a patient;
CC   (e) selecting a composition for inhibiting prostate cancer in a patient;
CC   (f) assessing the prostate cell carcinogenic potential of a compound; (g)
CC   determining whether prostate cancer has metastasized in a patient; (h)
CC   assessing the aggressiveness or indolence of prostate cancer in a patient
CC   ; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker
XX
SQ   Sequence 497 BP; 145 A; 101 C; 133 G; 118 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 46;  DB 5;  Length 497;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-10;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
             ||||||||||||||||||||||||||||||||||||||||||||||
Db        192 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 237


RESULT 85
AAH18284/c
ID   AAH18284 standard; cDNA; 2537 BP.
XX
AC   AAH18284;
XX
DT   26-JUN-2001  (first entry)
XX
DE   Human cDNA sequence SEQ ID NO:18263.
XX
KW   Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
XX
OS   Homo sapiens.
XX
PN   EP1074617-A2.
XX
PD   07-FEB-2001.
XX
PF   28-JUL-2000; 2000EP-00116126.
XX
PR   29-JUL-1999;   99JP-00248036.
PR   27-AUG-1999;   99JP-00300253.
PR   11-JAN-2000; 2000JP-00118776.
PR   02-MAY-2000; 2000JP-00183767.
PR   09-JUN-2000; 2000JP-00241899.
XX
PA   (HELI-) HELIX RES INST.
XX
PI   Ota T,  Isogai T,  Nishikawa T,  Hayashi K,  Saito K,  Yamamoto J;
PI   Ishii S,  Sugiyama T,  Wakamatsu A,  Nagai K,  Otsuki T;
XX
DR   WPI; 2001-318749/34.
XX
PT   Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT   length cDNAs defined in the specification, and for the detection and/or
PT   diagnosis of the abnormality of the proteins encoded by the full-length
PT   cDNAs.
XX
PS   Claim 8; SEQ ID NO 18263; 2537pp + Sequence Listing; English.
XX
CC   The present invention describes primer sets for synthesising 5602 full-
CC   length cDNAs defined in the specification. Where a primer set comprises:
CC   (a) an oligo-dT primer and an oligonucleotide complementary to the
CC   complementary strand of a polynucleotide which comprises one of the 5602
CC   nucleotide sequences defined in the specification, where the
CC   oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC   of an oligonucleotide comprising a sequence complementary to the
CC   complementary strand of a polynucleotide which comprises a 5'-end
CC   sequence and an oligonucleotide comprising a sequence complementary to a
CC   polynucleotide which comprises a 3'-end sequence, where the
CC   oligonucleotide comprises at least 15 nucleotides and the combination of
CC   the 5'-end sequence/3'-end sequence is selected from those defined in the
CC   specification. The primer sets can be used in antisense therapy and in
CC   gene therapy. The primers are useful for synthesising polynucleotides,
CC   particularly full-length cDNAs. The primers are also useful for the
CC   detection and/or diagnosis of the abnormality of the proteins encoded by
CC   the full-length cDNAs. The primers allow obtaining of the full-length
CC   cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC   AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC   represent human amino acid sequences; and AAH13629 to AAH13632 represent
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CC   oligonucleotides, all of which are used in the exemplification of the
CC   present invention
XX
SQ   Sequence 2537 BP; 756 A; 503 C; 473 G; 805 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 46;  DB 4;  Length 2537;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-10;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
             ||||||||||||||||||||||||||||||||||||||||||||||
Db       1359 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 1314


RESULT 86
ADY15647
ID   ADY15647 standard; DNA; 6530 BP.
XX
AC   ADY15647;
XX
DT   05-MAY-2005  (first entry)
XX
DE   DNA encoding a PRO polypeptide, SEQ ID NO 1453.
XX
KW   Antiinflammatory; Immune disorder; Dermatological; Immunosuppressive;
KW   Antirheumatic; Antiarthritic; Osteopathic; Hemostatic; Antianemic;
KW   Antithyroid; Antidiabetic; Nephrotropic; CNS-Gen.; Hepatotropic;
KW   Virucide; Gastrointestinal-Gen.; Antipsoriatic; Antiasthmatic;
KW   Antiallergic; ds; gene; diagnosis.
XX
OS   Homo sapiens.
XX
PN   WO2005016962-A2.
XX
PD   24-FEB-2005.
XX
PF   11-AUG-2004; 2004WO-US026249.
XX
PR   11-AUG-2003; 2003US-0493546P.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Abbas A,  Clark H,  Ouyang W,  Williams MP,  Wood WI,  Wu TD;
XX
DR   WPI; 2005-182330/19.
XX
PT   New nucleic acid encoding PRO polypeptide, useful for diagnosing and
PT   treating an immune related disorder, e.g. systemic lupus erythematosus,
PT   rheumatoid arthritis, osteoarthritis, thyroiditis, or diabetes mellitus.
XX
PS   Claim 1; SEQ ID NO 1453; 158pp; English.
XX
CC   The invention relates to an isolated nucleic acid encoding a PRO
CC   polypeptide. The polypeptide, agonist or an antagonist, antibody,
CC   composition, and method are useful for diagnosing and treating an immune
CC   related disorder, e.g. systemic lupus erythematosus, rheumatoid
CC   arthritis. The present sequence represents a DNA encoding a PRO
CC   polypeptide.
XX
SQ   Sequence 6530 BP; 1644 A; 1400 C; 1429 G; 2057 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 46;  DB 14;  Length 6530;
  Best Local Similarity   100.0%;  Pred. No. 1e-10;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
             ||||||||||||||||||||||||||||||||||||||||||||||
Db       3499 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 3544


RESULT 87
ACC82887/c
ID   ACC82887 standard; DNA; 7001 BP.
XX
AC   ACC82887;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human thyroid hormone receptor interactor 6 (TRIP6) gene fragment.
XX
KW   Human; antisense; thyroid hormone receptor interactor 6; TRIP6; tumour;
KW   OPA-interacting protein-1; OIP-1; zyxin-related protein-1; prophylaxis;
KW   inflammation; therapy; hyperproliferative disorder; infection; cancer;
KW   chromosome 7q22; ZRP-1; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   exon            486. .740
FT                   /*tag= a
FT                   /number= 1
FT   intron          741. .994
FT                   /*tag= b
FT                   /number= 1
FT   exon            995. .1122
FT                   /*tag= c
FT                   /number= 2
FT   intron          1123. .1241
FT                   /*tag= d
FT                   /number= 2
FT   exon            1242. .1367
FT                   /*tag= e
FT                   /number= 3
FT   intron          1368. .1628
FT                   /*tag= f
FT                   /number= 3
FT   exon            1629. .2000
FT                   /*tag= g
FT                   /number= 4
FT   intron          2001. .3503
FT                   /*tag= h
FT                   /number= 4
FT   exon            3504. .3597
FT                   /*tag= i
FT                   /number= 5
FT   intron          3598. .3707
FT                   /*tag= j
FT                   /number= 5
FT   exon            3708. .3877
FT                   /*tag= k
FT                   /number= 6
FT   intron          3878. .4676
FT                   /*tag= l
FT                   /number= 6
FT   exon            4677. .4855
FT                   /*tag= m
FT                   /number= 7
FT   intron          4856. .5757
FT                   /*tag= n
FT                   /number= 7
FT   exon            5758. .5878
FT                   /*tag= o
FT                   /number= 8
FT   intron          5879. .6305
FT                   /*tag= p
FT                   /number= 8
FT   exon            6306. .6650
FT                   /*tag= q
FT                   /number= 9
XX
PN   WO2003040328-A2.
XX
PD   15-MAY-2003.
XX
PF   05-NOV-2002; 2002WO-US035479.
XX
```

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PR   08-NOV-2001; 2001US-00008789.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Dobie K;
XX
DR   WPI; 2003-430662/40.
XX
PT   New antisense oligonucleotides targeted to nucleic acids encoding thyroid
PT   hormone receptor interactor 6, useful for diagnosing or treating
PT   hyperproliferative disorders, such as cancer.
XX
PS   Example 15; Page 89-93; 111pp; English.
XX
CC   The invention relates to antisense compounds targetted to a nucleic acid
CC   encoding thyroid hormone receptor interactor 6 (TRIP6) to inhibit its
CC   expression. TRIP6 is also known as OPA-interacting protein-1 (OIP-1) and
CC   zyxin-related protein-1 (ZRP-1). TRIP6 DNA is located on chromosome 7q22.
CC   Antisense compounds of the invention are useful for modulating the
CC   expression of TRIP6 and for treating diseases or conditions associated
CC   with the expression of TRIP6 such as hyperproliferative disorders (e.g.
CC   cancer). They are useful for diagnostics, therapeutics, prophylaxis e.g.
CC   to prevent or delay infection, inflammation or tumour formation, as
CC   research reagents and kits and in distinguishing between functions of
CC   various members of a biological pathway. The are also useful in antisense
CC   therapy. The present sequence is human TRIP6 gene fragment
XX
SQ   Sequence 7001 BP; 1380 A; 1954 C; 1984 G; 1683 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 46;  DB 10;  Length 7001;
  Best Local Similarity   100.0%;  Pred. No. 1e-10;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||
Db       6054 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 6009


RESULT 88
AAL06913
ID   AAL06913 standard; DNA; 13409 BP.
XX
AC   AAL06913;
XX
DT   21-NOV-2001  (first entry)
XX
DE   Human reproductive system related antigen DNA SEQ ID NO: 9601.
XX
KW   Human; reproductive system related antigen; reproductive system disorder;
KW   cancer; gene therapy; ds.
XX
OS   Homo sapiens.
XX
PN   WO200155320-A2.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001339.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
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PR   17-MAR-2000; 2000US-0190076P.
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PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
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PR   11-JUL-2000; 2000US-0217496P.
PR   14-JUL-2000; 2000US-0218290P.
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PR   26-JUL-2000; 2000US-0220964P.
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PR   14-AUG-2000; 2000US-0225447P.
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PR   14-AUG-2000; 2000US-0225758P.
PR   14-AUG-2000; 2000US-0225759P.
PR   18-AUG-2000; 2000US-0226279P.
PR   22-AUG-2000; 2000US-0226681P.
PR   22-AUG-2000; 2000US-0226868P.
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PR   05-SEP-2000; 2000US-0229509P.
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PR   20-OCT-2000; 2000US-0241787P.
PR   20-OCT-2000; 2000US-0241808P.
PR   20-OCT-2000; 2000US-0241809P.
PR   20-OCT-2000; 2000US-0241826P.
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PR 01-NOV-2000; 2000US-0244617P.
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PR 17-NOV-2000; 2000US-0249264P.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-465570/50.
XX
PT Isolated nucleic acid molecule encoding a reproductive system antigen is
PT used in preventing, treating or ameliorating a medical condition.
XX
PS Disclosure; SEQ ID NO 9601; 1297pp + Sequence Listing; English.
XX
CC The present invention provides the protein and coding sequences of a
CC number of human reproductive system related antigens. These can be used
CC in the prevention and treatment of reproductive system disorders,
CC including cancer. The present sequence is a genomic sequence encoding a
CC protein of the invention
XX
SQ Sequence 13409 BP; 3673 A; 2774 C; 2856 G; 4106 T; 0 U; 0 Other;

Query Match 1.5%; Score 46; DB 4; Length 13409;
Best Local Similarity 100.0%; Pred. No. 1e-10;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
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Db 12121 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 12166

RESULT 89
ABA08135
ID ABA08135 standard; DNA; 13409 BP.
XX
AC ABA08135;
XX
DT 11-JAN-2002 (first entry)
XX
DE Human ovarian and breast cancer associated polynucleotide SEQ ID NO 930.
XX
KW Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
KW antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer;
KW vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;
KW cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
KW neurological disease; infection; human; secreted protein; ds.
XX
OS Homo sapiens.
XX
PN WO200155325-A2.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001345.
XX
PR 31-JAN-2000; 2000US-0179065P.
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PR 27-SEP-2000; 2000US-0235834P.
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PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
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PR 01-DEC-2000; 2000US-0250160P.
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PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
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PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-488786/53.
XX
PT New isolated ovarian and/or breast cancer related nucleic acids and
PT polypeptides, useful for diagnosing, treating and/or preventing human
PT diseases and disorders, particularly ovarian and/or breast cancer.
XX
PS Disclosure; SEQ ID NO 930; 577pp + Sequence Listing; English.
XX
CC The invention relates to novel genes (ABA07454-ABA08224) and proteins
CC (ABB10743-ABB10980) useful for preventing, treating or ameliorating
CC medical conditions e.g. by protein or gene therapy. The genes are
CC isolated from a range of human tissues disclosed in the specification.
CC The nucleic acids, proteins, antibodies and (ant)agonists are useful in
CC the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and
CC ovarian cancer and other cancers of the adrenal gland, bone, bone marrow,
CC breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune
CC disorders e.g. Addison's disease, allergies, autoimmune haemolytic
CC anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease,
CC multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c)
CC cardiovascular disorders such as myocardial ischaemias; (d) wound healing
CC ; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f)
CC infectious diseases such as viral, bacterial, fungal and parasitic
CC infections. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13409 BP; 3673 A; 2774 C; 2856 G; 4106 T; 0 U; 0 Other;

Query Match 1.5%; Score 46; DB 4; Length 13409;
Best Local Similarity 100.0%; Pred. No. 1e-10;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
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Db 12121 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 12166

RESULT 90
ABK43029
ID ABK43029 standard; DNA; 18501 BP.
XX
AC ABK43029;
XX
DT 21-MAY-2002 (first entry)
XX
DE Genomic sequence #928 encoding novel human connective tissue polypeptide.
XX
KW Human; connective tissue related disorder; cancer; gene therapy;
KW cytostatic; gene; ds.

XX
OS Homo sapiens.
XX
PN WO200155343-A1.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001322.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
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PR 30-JUN-2000; 2000US-0215135P.
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PR 07-JUL-2000; 2000US-0216880P.
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PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
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PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
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PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX

```
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-565190/63.
XX
PT   Nucleic acid encoding novel connective tissue associated polypeptides,
PT   used in diagnosing, preventing, treating or ameliorating a disorder such
PT   as cancer or rheumatoid arthritis.
XX
PS   Disclosure; SEQ ID NO 1916; 673pp; English.
XX
CC   The present invention relates to the isolation of novel human connective
CC   tissue related polypeptides (AAU86435-AAU86923) and the polynucleotide
CC   (cDNA and genomic) sequences encoding them. The sequences of the
CC   invention are useful in the diagnosis, treatment, prevention and/or
CC   prognosis of diseases associated with connective tissue(s), including
CC   cancer. The polynucleotide sequences of the invention are also useful in
CC   gene therapy. ABK42102-ABK43116 represent genomic sequences encoding the
CC   novel human connective tissue related polypeptides. Note: The sequence
CC   data for this patent did not form part of the printed specification, but
CC   was obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 18501 BP; 5504 A; 3746 C; 3948 G; 5301 T; 0 U; 2 Other;

  Query Match             1.5%;  Score 46;  DB 4;  Length 18501;
  Best Local Similarity   100.0%;  Pred. No. 9.9e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||
Db        224 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 269


RESULT 91
ADB61185
ID   ADB61185 standard; DNA; 18501 BP.
XX
AC   ADB61185;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Connective tissue related genomic DNA #928.
XX
KW   cytostatic; neuroprotective; nootropic; antiparkinsonian; cardiovascular;
KW   antiarteriosclerotic; immunosuppressive; antirheumatic; antiarthritic;
KW   antiinflammatory; antiallergic; antiasthmatic; dermatological;
KW   nephrotopic; virucide; fungicide; antibacterial; antiparasitic;
KW   gene therapy; ds; connective tissues disorder; rheumatoid arthritis;
KW   systemic lupus erythematosus; scleroderma; Sjogren's syndrome; cancer;
KW   cancer metastasis; neoplasia; leukaemia; neurodegenerative disorder;
KW   Alzheimer's disease; Parkinson's disease; cardiovascular disease;
KW   atherosclerosis; myocarditis; cardiopulmonary bypass complication;
KW   autoimmune disease; multiple sclerosis; allergic reaction; asthma;
KW   rhinitis; eczema; inflammatory condition; Crohn's disease; nephritis;
KW   gastrointestinal disorder; inflammatory bowel disease;
KW   organ transplant rejection; immune system disorder; Bruton's disease;
KW   X-linked lymphoproliferative syndrome;
KW   B-cell lymphoproliferative disorder; HIV; AIDS; infection;
KW   chromosome identification; chromosome mapping;
KW   connective tissue related polynucleotide; gene; ds.
XX
OS   Homo sapiens.
XX
PN   US2003054375-A1.
XX
PD   20-MAR-2003.
XX
PF   07-MAR-2002; 2002US-00092154.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
PR   16-MAR-2000; 2000US-0189874P.
PR   17-MAR-2000; 2000US-0190076P.
PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
PR   14-JUL-2000; 2000US-0218290P.
PR   26-JUL-2000; 2000US-0220963P.
PR   26-JUL-2000; 2000US-0220964P.
PR   14-AUG-2000; 2000US-0224518P.
PR   14-AUG-2000; 2000US-0224519P.
PR   14-AUG-2000; 2000US-0225213P.
PR   14-AUG-2000; 2000US-0225214P.
PR   14-AUG-2000; 2000US-0225266P.
PR   14-AUG-2000; 2000US-0225267P.
PR   14-AUG-2000; 2000US-0225268P.
PR   14-AUG-2000; 2000US-0225270P.
PR   14-AUG-2000; 2000US-0225447P.
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PR   14-AUG-2000; 2000US-0225759P.
PR   18-AUG-2000; 2000US-0226279P.
PR   22-AUG-2000; 2000US-0226681P.
PR   22-AUG-2000; 2000US-0226868P.
PR   22-AUG-2000; 2000US-0227182P.
PR   23-AUG-2000; 2000US-0227009P.
PR   30-AUG-2000; 2000US-0228924P.
PR   01-SEP-2000; 2000US-0229287P.
PR   01-SEP-2000; 2000US-0229343P.
PR   01-SEP-2000; 2000US-0229344P.
PR   01-SEP-2000; 2000US-0229345P.
PR   05-SEP-2000; 2000US-0229509P.
PR   05-SEP-2000; 2000US-0229513P.
PR   06-SEP-2000; 2000US-0230437P.
PR   06-SEP-2000; 2000US-0230438P.
PR   08-SEP-2000; 2000US-0231242P.
PR   08-SEP-2000; 2000US-0231243P.
PR   08-SEP-2000; 2000US-0231244P.
PR   08-SEP-2000; 2000US-0231413P.
PR   08-SEP-2000; 2000US-0231414P.
PR   08-SEP-2000; 2000US-0232080P.
PR   08-SEP-2000; 2000US-0232081P.
PR   12-SEP-2000; 2000US-0231968P.
PR   14-SEP-2000; 2000US-0232397P.
PR   14-SEP-2000; 2000US-0232398P.
PR   14-SEP-2000; 2000US-0232399P.
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PR   14-SEP-2000; 2000US-0233063P.
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PR   14-SEP-2000; 2000US-0233065P.
PR   21-SEP-2000; 2000US-0234223P.
PR   21-SEP-2000; 2000US-0234274P.
PR   25-SEP-2000; 2000US-0234997P.
PR   25-SEP-2000; 2000US-0234998P.
PR   26-SEP-2000; 2000US-0235484P.
PR   27-SEP-2000; 2000US-0235834P.
PR   27-SEP-2000; 2000US-0235836P.
PR   29-SEP-2000; 2000US-0236327P.
PR   29-SEP-2000; 2000US-0236367P.
PR   29-SEP-2000; 2000US-0236368P.
PR   29-SEP-2000; 2000US-0236369P.
PR   29-SEP-2000; 2000US-0236370P.
PR   02-OCT-2000; 2000US-0236802P.
PR   02-OCT-2000; 2000US-0237037P.
PR   02-OCT-2000; 2000US-0237038P.
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PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
PR 17-JAN-2001; 2001US-00764847.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM, Barash SC;
XX
DR WPI; 2003-634869/60.
DR P-PSDB; ADB59732.
XX
PT New connective tissue-related polypeptides and polynucleotides, useful
PT for treating, preventing and/or prognosing e.g. disorders of connective
PT tissue, (e.g. rheumatoid arthritis), cancers, cancer metastases and/or
PT neoplasias.
XX
PS Disclosure; SEQ ID NO 1916; 248pp; English.
XX
CC The invention describes an isolated nucleic acid molecule (I), which
CC comprises a sequence that is at least 95 % identical to a connective
CC tissue-related polynucleotide encoding connective tissue antigens (CTA).
CC The polypeptide or polynucleotide is useful for preventing, treating, or
CC ameliorating medical conditions in a mammal. The connective tissue
CC polypeptides, polynucleotides and antibodies are particularly useful for
CC treating, preventing and/or prognosing disorders of connective tissues
CC (e.g. rheumatoid arthritis, discoid and systemic lupus erythematosus,
CC scleroderma, or Sjogren's syndrome), cancers, cancer metastases and/or
CC neoplasias (e.g. leukaemia), neurodegenerative disorders (e.g.
CC Alzheimer's disease, or Parkinson's disease), cardiovascular diseases
CC (e.g. atherosclerosis, myocarditis or cardiopulmonary bypass
CC complications), autoimmune diseases (e.g. systemic lupus erythematosus,
CC rheumatoid arthritis, or multiple sclerosis), allergic reactions (e.g.

Query Match 1.5%; Score 46; DB 9; Length 18501;
Best Local Similarity 100.0%; Pred. No. 9.9e-11;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
||||||||||||||||||||||||||||||||||||||||||||||
Db 224 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 269

RESULT 92
ADC21019/c
ID ADC21019 standard; DNA; 18501 BP.
XX
AC ADC21019;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human secreted protein-related DNA sequence #437.
XX
KW gene therapy; human; secreted protein; haemopoietic disorder;
KW haematological disorder; anaemia; haemophilia; inflammatory disorder;
KW inflammatory bowel disease; Crohn's disease; neoplastic disease; cancer;
KW leukaemia; wound healing; epithelial cell proliferation disorder;
KW immune disorder; autoimmune disorder; asthmatic disorder;
KW cardiovascular disorder; atherosclerosis; myocarditis;
KW infectious disease; HIV; AIDS; endocrine disorder; diabetes;
KW gastrointestinal disorder; duodenal ulcer; gastroenteritis; gene; ds.
XX
OS Homo sapiens.
XX
PN WO200292787-A2.
XX
PD 21-NOV-2002.
XX
PF 26-MAR-2002; 2002WO-US009257.
XX
PR 27-MAR-2001; 2001US-0278650P.
PR 12-SEP-2001; 2001US-00950082.
PR 12-SEP-2001; 2001US-00950083.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM;
XX
DR WPI; 2003-129287/12.
XX
PT New human secreted proteins and nucleic acid molecules, useful for
PT preparing a diagnostic or pharmaceutical composition for diagnosing,
PT preventing or treating hematopoietic or hematologic disorders, e.g.
PT anemia or hemophilia.
XX
PS Disclosure; SEQ ID NO 973; 1512pp; English.
XX
CC The invention comprises the amino acid and coding sequences of human

```
CC   secreted proteins. The DNA and protein sequences of the invention are
CC   useful for detecting, preventing, diagnosing, prognosticating, treating
CC   or ameliorating: haematopoietic or haematological disorders (e.g. anaemia
CC   and haemophilia); inflammatory disorders (e.g. inflammatory bowel disease
CC   and Crohn's disease); neoplastic disease (e.g. cancer and leukaemia);
CC   wound healing and disorders of epithelial cell proliferation; immune
CC   disorders (e.g. autoimmune disorders and asthmatic disorders);
CC   cardiovascular disorders (e.g. atherosclerosis and myocarditis);
CC   infectious disease (e.g. HIV/AIDS); endocrine disorders (e.g. diabetes);
CC   and gastrointestinal disorders (e.g. duodenal ulcers and
CC   gastroenteritis). The present DNA sequence was used in the
CC   exemplification of the invention.
XX
SQ   Sequence 18501 BP; 5301 A; 3948 C; 3746 G; 5504 T; 0 U; 2 Other;

  Query Match             1.5%;  Score 46;  DB 10;  Length 18501;
  Best Local Similarity   100.0%;  Pred. No. 9.9e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||
Db      18278 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 18233


RESULT 93
ABT17021/c
ID   ABT17021 standard; DNA; 18501 BP.
XX
AC   ABT17021;
XX
DT   03-APR-2003  (first entry)
XX
DE   Human secreted protein-related DNA sequence - SEQ ID No 375.
XX
KW   Human; gene; ds; protein therapy; immediate hypersensitivity disease;
KW   allergic disorder; asthmatic disorder; gene therapy; secreted protein;
KW   hay fever; allergic conjunctivitis; allergic rhinitis;
KW   binding partner identification; chromosome identification;
KW   radiation hybrid mapping; long-range restriction mapping.
XX
OS   Homo sapiens.
XX
PN   WO200277188-A2.
XX
PD   03-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009239.
XX
PR   27-MAR-2001; 2001US-0278650P.
PR   12-SEP-2001; 2001US-00950082.
PR   12-SEP-2001; 2001US-00950083.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM;
XX
DR   WPI; 2003-175010/17.
XX
PT   Use of human secreted proteins and nucleic acids for preparing a
PT   diagnostic or pharmaceutical composition for diagnosing or treating
PT   allergic or asthmatic disorders, e.g. asthma, hay fever, or allergic
PT   conjunctivitis or rhinitis.
XX
PS   Disclosure; Page 810-815; 823pp; English.
XX
CC   The invention comprises the amino acid and coding sequences of human
CC   secreted proteins. The DNA and protein sequences of the invention are
CC   useful for the diagnosis and treatment of allergic disorders, asthmatic
CC   disorders and immediate hypersensitivity diseases (e.g. hay fever,
CC   allergic conjunctivitis and allergic rhinitis). The proteins of the
CC   invention are also useful for identifying a binding partner. The nucleic
CC   acids of the invention are also useful for chromosome identification,
CC   radiation hybrid mapping or long-range restriction mapping. The present
CC   DNA sequence represents a human secreted protein-related DNA sequence
XX
SQ   Sequence 18501 BP; 5301 A; 3948 C; 3746 G; 5504 T; 0 U; 2 Other;

  Query Match             1.5%;  Score 46;  DB 10;  Length 18501;
  Best Local Similarity   100.0%;  Pred. No. 9.9e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||
Db      18278 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 18233


RESULT 94
ABZ68161/c
ID   ABZ68161 standard; DNA; 18501 BP.
XX
AC   ABZ68161;
XX
DT   26-MAR-2003  (first entry)
XX
DE   Human secreted protein encoding genomic DNA SEQ ID NO 1684.
XX
KW   Human; secreted protein; nootropic; neuroprotective; cytostatic;
KW   virucide; dermatological; immunosuppressive; antiinflammatory; anti-HIV;
KW   vulnerary; antibacterial; antiparkinsonian; antisickling; antianaemic;
KW   antiarthritic; cancer; antirheumatic; hepatotropic; cerebroprotective;
KW   antiinflammatory; antiallergic; antidiabetic; antiulcer; anticonvulsant;
KW   antifungal; antiparasitic; cardiant; immune disorder; infection; vaccine;
KW   cardiovascular disorder; neurological disease; nephrotropic;
KW   gene therapy; gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO200277186-A2.
XX
PD   03-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009188.
XX
PR   27-MAR-2001; 2001US-0278650P.
PR   12-SEP-2001; 2001US-00950082.
PR   12-SEP-2001; 2001US-00950083.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM;
XX
DR   WPI; 2003-040583/03.
XX
PT   New human secreted proteins encoded by genes contained in cDNA clones
PT   (e.g. HGCAC19), useful for preventing, treating or diagnosing e.g. AIDS,
PT   multiple sclerosis, herpes virus, leukemia, tick-borne encephalitis or
PT   West Nile fever.
XX
PS   Disclosure; Page 2321-2325; 2423pp; English.
XX
CC   The invention relates to novel human genes (ABZ66891-ABZ68209) and the
CC   encoded secreted proteins (ABP99470-ABP99872) useful for preventing,
CC   treating or ameliorating medical conditions e.g. by protein or gene
CC   therapy. The genes are isolated from a range of human tissues disclosed
CC   in the specification. The nucleic acids, proteins, antibodies and
CC   (ant)agonists are useful in the diagnosis, treatment and prevention of:
CC   (a) cancer, e.g. breast and ovarian cancer and other cancers of the
CC   adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver,
CC   lung or urogenital; (b) immune disorders e.g. Addison's disease,
CC   allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis,
CC   diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid
CC   arthritis and ulcerative colitis; (c) cardiovascular disorders such as
CC   myocardial ischaemias; (d) wound healing; (e) neurological diseases e.g.
CC   cerebral anoxia and epilepsy; and (f) infectious diseases such as viral,
CC   bacterial, fungal and parasitic infections
XX
```

```
SQ   Sequence 18501 BP; 5301 A; 3948 C; 3746 G; 5504 T; 0 U; 2 Other;

  Query Match             1.5%;  Score 46;  DB 10;  Length 18501;
  Best Local Similarity   100.0%;  Pred. No. 9.9e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||
Db      18278 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 18233


RESULT 95
ADI81379/c
ID   ADI81379 standard; DNA; 25001 BP.
XX
AC   ADI81379;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human P2X4 genomic DNA sequence.
XX
KW   antisense oligonucleotide; P2X4; P2X4-associated diseases;
KW   neurological disorder; bone disorder; osteoporosis; rheumatoid arthritis;
KW   human; ds.
XX
OS   Homo sapiens.
XX
PN   US2004002152-A1.
XX
PD   01-JAN-2004.
XX
PF   01-JUL-2002; 2002US-00187659.
XX
PR   01-JUL-2002; 2002US-00187659.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dobie KW;
XX
DR   WPI; 2004-081656/08.
XX
PT   New antisense oligonucleotides for modulating P2X4 expression, useful for
PT   diagnosing, preventing or treating conditions associated with P2X4, e.g.
PT   neurological disorders, osteoporosis or rheumatoid arthritis.
XX
PS   Example 15; SEQ ID NO 11; 67pp; English.
XX
CC   The invention comprises antisense oligonucleotides that are targeted to a
CC   nucleic acid encoding P2X4. The antisense oligonucleotides are useful for
CC   inhibiting the expression of P2X4 in cells or tissues to treat diseases
CC   associated with P2X4 expression, such as: neurological disorders, bone
CC   disorders (e.g. osteoporosis), or rheumatoid arthritis. The present
CC   nucleic acid represents the human P2X4 genomic DNA sequence.
XX
SQ   Sequence 25001 BP; 5940 A; 6387 C; 6220 G; 6454 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 46;  DB 12;  Length 25001;
  Best Local Similarity   100.0%;  Pred. No. 9.8e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
             |||||||||||||||||||||||||||||||||||||||||||||
Db       2633 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2588


RESULT 96
ADH36221/c
ID   ADH36221 standard; DNA; 28616 BP.
XX
AC   ADH36221;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human purinergic receptor P2X4 gene sequence.
XX
KW   fat deposition; leanness; non-insulin dependent diabetes mellitus; NIDDM;
KW   purinergic receptor; P2X4; antidiabetic; anorectic; diabetes; obesity;
KW   human; gene; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   variation       replace(11030,T)
FT                   /*tag= a
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(14744,T)
FT                   /*tag= b
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(15059,G)
FT                   /*tag= c
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(15847,T)
FT                   /*tag= d
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(17338,T)
FT                   /*tag= e
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(21708,G)
FT                   /*tag= f
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(22713,T)
FT                   /*tag= g
FT                   /standard_name= "Single nucleotide polymorphism"
XX
PN   WO2003101177-A2.
XX
PD   11-DEC-2003.
XX
PF   04-JUN-2003; 2003WO-US017676.
XX
PR   04-JUN-2002; 2002US-0386012P.
XX
PA   (SEQU-) SEQUENOM INC.
XX
PI   Adam GIR,  Langdown ML,  Roth RB,  Denissenko MF,  Smylie KJ;
XX
DR   WPI; 2004-053318/05.
DR   P-PSDB; ADH36222, ADH36223.
XX
PT   Diagnosing predisposition to fat deposition, leanness or non-insulin
PT   dependent diabetes mellitus (NIDDM) comprises detecting the presence or
PT   absence of a polymorphic variation in a purinergic receptor.
XX
PS   Claim 1; SEQ ID NO 1; 154pp; English.
XX
CC   This invention relates to a novel method of diagnosing a predisposition
CC   to fat deposition, leanness or non-insulin dependent diabetes mellitus
CC   (NIDDM) in a subject. The method comprises detecting the presence or
CC   absence of a polymorphic variation associated with fat deposition,
CC   leanness or NIDDM at a polymorphic site in a purinergic receptor (P2X4)
CC   nucleotide sequence in a nucleic acid sample from a subject. The
CC   invention may be useful for the development of compounds with an
CC   antidiabetic or anorectic activity. The method is useful for diagnosing a
CC   predisposition to fat deposition, leanness or NIDDM. The nucleic acid
CC   encoding the polypeptide is useful for diagnosing conditions or diseases
CC   including fat deposition or NIDDM, also in treating diabetes and obesity.
CC   The present sequence is that of the purinergic receptor (P2X4) nucleotide
CC   sequence which was used in the method of the invention.
XX
SQ   Sequence 28616 BP; 6868 A; 7260 C; 7008 G; 7438 T; 0 U; 42 Other;

  Query Match             1.5%;  Score 46;  DB 12;  Length 28616;
  Best Local Similarity   100.0%;  Pred. No. 9.7e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
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                     ||||||||||||||||||||||||||||||||||||||||||||||||
Db       4783 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 4738


RESULT 97
ADZ42284/c
ID   ADZ42284 standard; DNA; 58000 BP.
XX
AC   ADZ42284;
XX
DT   14-JUL-2005  (first entry)
XX
DE   Human Klotho gene with C49620T SNP Seq 11.
XX
KW   renal disease; nephrotropic; SNP detection;
KW   single nucleotide polymorphism; SNP; Klotho; ds; gene.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   5'UTR           5208. .5215
FT                   /*tag=  a
FT   CDS             5216. .50554
FT                   /*tag=  c
FT                   /product= "Klotho protein"
FT   exon            5216. .6034
FT                   /*tag=  b
FT                   /number= 1
FT   intron          6035. .42540
FT                   /*tag=  d
FT                   /number= 1
FT   exon            42541. .43051
FT                   /*tag=  e
FT                   /number= 2
FT   intron          43052. .43820
FT                   /*tag=  f
FT                   /number= 2
FT   exon            43821. .44140
FT                   /*tag=  g
FT                   /number= 3
FT   intron          44141. .49452
FT                   /*tag=  h
FT                   /number= 3
FT   exon            49453. .50554
FT                   /*tag=  i
FT                   /number= 4
FT   variation       49620
FT                   /*tag=  j
FT                   /standard_name= "Single nucleotide polymorphism"
FT   3'UTR           52961. .54916
FT                   /*tag=  k
XX
PN   JP2005110606-A.
XX
PD   28-APR-2005.
XX
PF   09-OCT-2003; 2003JP-00350959.
XX
PR   09-OCT-2003; 2003JP-00350959.
XX
PA   (KOKU-) KOKURITSU JUNKANKI BYO CENT SOCHO.
PA   (DOKU-) DOKURITSU GYOSEI HOJIN IYAKUHIN IRYO KIK.
XX
DR   WPI; 2005-326228/34.
XX
PT   Testing hypertensive renal disease factor, by determining polymorphism in
PT   genotype of gene relevant to hypertensive renal disease, and estimating
PT   risk factor for hypertensive renal disease based on determined genotype,
PT   as index.
XX
PS   Claim 1; SEQ ID NO 11; 440pp; Japanese.
XX
CC   This invention relates to a novel method for testing hypertensive renal
CC   disease. Specifically, it refers to determining polymorphisms in the
CC   genotype of a gene relevant to hypertensive renal disease and estimating
CC   the risk factor for developing the disease accordingly. The present
CC   invention describes identifying gene polymorphisms in at least one of the
CC   following genes, namely endothelin converting-enzyme 1, mineralocorticoid
CC   receptor, urotensin II, superoxide-dismutase 3, thiazide sensitivity NaCl
CC   symporter, guanosine cyclase-A, hepatocyte growth factor, beta-3
CC   adrenoreceptor, aldosterone synthetase, endothelium nitrogen monoxide
CC   synthetase, klotho and a sodium-calcium exchanger. Furthermore, it
CC   provides primers and probes for determining hypertensive renal disease
CC   factors, in particular in relation to renal diseases including
CC   hypertensive early renal disease and hypertensive kidney blood flow
CC   obstruction. The method enables detection of risk factors, and thus helps
CC   in preventing or delaying renal disease. This polynucleotide sequence is
CC   the full length human Klotho gene given in an exemplification of the
CC   invention.
XX
SQ   Sequence 58000 BP; 16432 A; 11653 C; 11941 G; 17973 T; 0 U; 1 Other;

  Query Match             1.5%;  Score 46;  DB 14;  Length 58000;
  Best Local Similarity   100.0%;  Pred. No. 9.5e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
                ||||||||||||||||||||||||||||||||||||||||||||||
Db      36196 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 36151


RESULT 98
ABD33407/c
ID   ABD33407 standard; DNA; 58922 BP.
XX
AC   ABD33407;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Human cancer-associated (CA) gene HD07-076.
XX
KW   Human; cancer-associated protein; CAP; cancer-associated gene; CA; gene;
KW   ds; cancer; cytostatic.
XX
OS   Homo sapiens.
XX
PN   WO2004058146-A2.
XX
PD   15-JUL-2004.
XX
PF   15-DEC-2003; 2003WO-US040081.
XX
PR   17-DEC-2002; 2002US-00322281.
XX
PA   (SAGR-) SAGRES DISCOVERY INC.
XX
PI   Morris DW,  Malandro MS;
XX
DR   WPI; 2004-499109/47.
XX
PT   Novel human cancer associated protein encoded within open reading frame
PT   of cancer associated gene, useful as targets for diagnosing cancer.
XX
PS   Claim 16; SEQ ID NO 526; 182pp; English.
XX
CC   The invention relates to cancer-associated proteins (CAP) and the cancer-
CC   associated (CA) nucleic acids encoding them. The invention also relates
CC   to a method for treating cancers involving administering to a patient an
CC   inhibitor of CAP, and a method of screening for anticancer activity in a
CC   potential drug involving providing a cell that expresses a CA gene,
CC   contacting a tissue sample derived from a cancer cell with an anticancer
CC   drug candidate and monitoring the effect of the anticancer drug candidate
CC   on expression of the CA gene. The CAP proteins are useful for detecting
CC   cancer associated with expression of a CAP protein in a test cell sample
CC   and for screening for a bioactive agent capable of modulating the
CC   activity of a CAP protein. The CA nucleic acids are useful for diagnosing
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CC   cancer, involving determining the expression of a CA nucleic acid in a
CC   tissue. This sequence represents a human CA gene of the invention. Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 58922 BP; 13257 A; 15256 C; 16255 G; 14082 T; 0 U; 72 Other;

  Query Match             1.5%;  Score 46;  DB 13;  Length 58922;
  Best Local Similarity   100.0%;  Pred. No. 9.5e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||
Db      53826 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 53781


RESULT 99
ADZ12540
ID   ADZ12540 standard; DNA; 70271 BP.
XX
AC   ADZ12540;
XX
DT   16-JUN-2005  (first entry)
XX
DE   Human cancer-associated genomic DNA #7.
XX
KW   Diagnosis; DNA microarray; microarray; biochip; cancer; neoplasm;
KW   cytostatic; gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO2005031001-A2.
XX
PD   07-APR-2005.
XX
PF   23-SEP-2004; 2004WO-US031617.
XX
PR   23-SEP-2003; 2003US-00669920.
XX
PA   (CHIR ) CHIRON CORP.
XX
PI   Morris DW,  Malandro MS;
XX
DR   WPI; 2005-273395/28.
XX
PT   Nucleic acid array useful for detecting cancer associated nucleic acid,
PT   comprises two or more nucleic acid probes.
XX
PS   Disclosure; SEQ ID NO 60; 198pp; English.
XX
CC   The invention relates to a nucleic acid array for detecting a cancer
CC   associated (CA) nucleic acid, comprising two or more nucleic acid probes.
CC   The invention also relates to a peptide array comprising two or more
CC   isolated polypeptides encoded by a CA nucleic acid sequence, a compound
CC   that binds to a polypeptide, an isolated antibody or its fragment which
CC   binds to a polypeptide, which is prepared by immunizing a host animal
CC   with a composition comprising the polypeptide or its antigen binding
CC   fragment and collecting cells from the host expressing antibodies against
CC   the antigen or its antigen binding fragment, a composition comprising the
CC   antibody and a carrier, a method of screening for anticancer activity, a
CC   method of detecting a CA nucleic acid, a method of diagnosing cancer, a
CC   method of treating cancer and a method of inhibiting expression of a CA
CC   nucleic acid in a cell. The CA nucleic acids are useful for detecting CA
CC   nucleic acids. The antibody is useful for detecting the presence or
CC   absence of cancer cells in an individual which involves contacting cells
CC   from the individual with the antibody and detecting a complex of a CA
CC   protein from the cancer cells and the antibody, where the detection of
CC   the complex correlates with the presence of cancer cells in the
CC   individual. The composition is useful for inhibiting growth of cancer
CC   cells in an individual or for delivering a therapeutic agent to cancer
CC   cells in an individual. The invention is also useful for diagnosing
CC   cancer, for treating cancer and for inhibiting expression of a CA gene in
CC   a cell. This sequence represents human cancer-associated genomic DNA of
CC   the invention.
XX
SQ   Sequence 70271 BP; 19379 A; 15870 C; 15381 G; 19641 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 46;  DB 14;  Length 70271;
  Best Local Similarity   100.0%;  Pred. No. 9.4e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||
Db      42048 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 42093


RESULT 100
ADE95974
ID   ADE95974 standard; DNA; 96594 BP.
XX
AC   ADE95974;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Human SYK gene genomic DNA sequence.
XX
KW   cancer diagnosis; cancer treatment; carcinoma; cytostatic; gene therapy;
KW   lymphoma; breast cancer; prostate cancer; leukaemia; ds; human; SYK.
XX
OS   Homo sapiens.
XX
PN   WO2003039484-A2.
XX
PD   15-MAY-2003.
XX
PF   08-NOV-2002; 2002WO-US036071.
XX
PR   08-NOV-2001; 2001US-00052482.
XX
PA   (SAGR-) SAGRES DISCOVERY.
XX
PI   Morris DW,  Engelhard EK;
XX
DR   WPI; 2003-441462/41.
XX
PT   New carcinoma associated nucleic acids and proteins, useful for screening
PT   drug candidates, or for diagnosing and treating carcinomas, e.g.
PT   lymphoma, breast cancer, prostate cancer or leukemia.
XX
PS   Claim 1; SEQ ID NO 232; 793pp; English.
XX
CC   This invention relates to novel recombinant nucleic acids for use in
CC   diagnosis and treatment of cancer, especially carcinomas, as well as the
CC   use of compositions in screening methods. The compositions of the
CC   invention may have cytostatic activity whilst the disclosed sequences may
CC   be useful for gene therapy. The carcinoma associated nucleic acids and
CC   proteins are useful for diagnosing and treating carcinomas, for example
CC   lymphoma, breast cancer, prostate cancer or leukaemia, or for screening
CC   drug candidates or bioactive agents capable of binding to, or modulating
CC   the activity of, a carcinoma associated protein. The present sequence is
CC   the genomic DNA sequence of the human SYK gene which is a carcinoma
CC   associated gene of the invention.
XX
SQ   Sequence 96594 BP; 27524 A; 20558 C; 21159 G; 26914 T; 0 U; 439 Other;

  Query Match             1.5%;  Score 46;  DB 10;  Length 96594;
  Best Local Similarity   100.0%;  Pred. No. 9.3e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||
Db      57089 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 57134


RESULT 101
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ADA02726
ID   ADA02726 standard; DNA; 96595 BP.
XX
AC   ADA02726;
XX
DT   06-NOV-2003  (first entry)
XX
DE   Human SYK carcinoma associated gene, SEQ ID NO:1244.
XX
KW   Human; carcinoma associated; oncogene; carcinoma; cancer; breast;
KW   prostate; lymphoma; leukaemia; cytostatic; gene therapy; drug screening;
KW   gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003057146-A2.
XX
PD   17-JUL-2003.
XX
PF   26-DEC-2002; 2002WO-US041414.
XX
PR   26-DEC-2001; 2001US-00035832.
XX
PA   (SAGR-) SAGRES DISCOVERY.
XX
PI   Morris DW;
XX
DR   WPI; 2003-587068/55.
XX
PT   New recombinant nucleic acid encoding carcinoma associated protein,
PT   useful for preparing compositions for treating carcinomas.
XX
PS   Claim 1; SEQ ID NO 1244; 245pp; English.
XX
CC   The invention relates to recombinant carcinoma associated (CA) nucleic
CC   acid sequences from mouse and human (ADA01482-ADA03094), and to
CC   recombinant carcinoma associated proteins (CAP) encoded by them. The
CC   invention also encompasses expression vectors and host cells comprising a
CC   CA nucleic acid, a polypeptide (especially an antibody) that specifically
CC   binds to the protein, and a biochip comprising CA nucleic acid or
CC   fragments thereof. The sequences of the invention were identified using
CC   oncogenic retroviruses, which insert into the genome of the host organism
CC   at random. Many of these do not carry transduced host oncogenes or
CC   pathogenic trans-acting viral genes, meaning that cancer incidence is a
CC   direct consequence of the effects of proviral integration into host
CC   protooncogenes. The CA nucleic acid sequences can be used to diagnose
CC   carcinoma (especially breast cancer, prostate cancer, lymphoma or
CC   leukaemia) or a propensity to carcinoma by determination of the sequence
CC   of a CA gene, or by determination of CA gene expression in particular
CC   tissues. CA nucleic acids, proteins and antibodies are also useful as
CC   therapeutic agents and in screening and evaluating drug candidates. The
CC   present sequence represents a specifically claimed human CA nucleic acid
CC   sequence of the invention. Note: The complete sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 96595 BP; 27524 A; 20559 C; 21158 G; 26915 T; 0 U; 439 Other;

  Query Match             1.5%;  Score 46;  DB 9;  Length 96595;
  Best Local Similarity   100.0%;  Pred. No. 9.3e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||
Db      57090 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 57135


RESULT 102
ADB72464
ID   ADB72464 standard; DNA; 96595 BP.
XX
AC   ADB72464;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human SYK gene.
XX
KW   human; ds; cytostatic; gene therapy; vaccine; carcinoma; lymphomas;
KW   cancer; neoplasm; adenocarcinoma; sarcoma; gene.
XX
OS   Homo sapiens.
XX
PN   WO2003008583-A2.
XX
PD   30-JAN-2003.
XX
PF   26-DEC-2001; 2001WO-US051291.
XX
PR   02-MAR-2001; 2001US-00798586.
PR   23-OCT-2001; 2001US-00004113.
PR   08-NOV-2001; 2001US-00052482.
PR   30-NOV-2001; 2001US-00997722.
PR   20-DEC-2001; 2001US-00034650.
XX
PA   (SAGR-) SAGRES DISCOVERY.
XX
PI   Morris DW,  Engelhard EK;
XX
DR   WPI; 2003-239337/23.
XX
PT   New recombinant nucleic acid, useful for treating carcinomas, lymphomas,
PT   cancers, neoplasm, adenocarcinoma, or sarcomas.
XX
PS   Claim 1; SEQ ID NO 292; 2304pp; English.
XX
CC   The invention relates to a novel recombinant nucleic acid comprising a
CC   nucleotide sequence selected from any of the 660 sequences fully defined
CC   in the specification. A polynucleotide of the invention has cytostatic
CC   activity, and may have a use in gene therapy, or in a vaccine. The
CC   recombinant nucleic acids and polypeptides are useful for treating
CC   carcinomas, e.g. lymphomas, cancers, neoplasm, adenocarcinoma, and
CC   sarcomas. The present sequence represents a human gene of the invention.
XX
SQ   Sequence 96595 BP; 27524 A; 20559 C; 21158 G; 26915 T; 0 U; 439 Other;

  Query Match             1.5%;  Score 46;  DB 10;  Length 96595;
  Best Local Similarity   100.0%;  Pred. No. 9.3e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||
Db      57090 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 57135


RESULT 103
ADO56274/c
ID   ADO56274 standard; DNA; 99100 BP.
XX
AC   ADO56274;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Human cyclin-dependent kinase 10, CDK10, genomic sequence.
XX
KW   gene therapy; human; ds; gene; melanoma;
KW   melanoma associated polymorphic variation; SNP;
KW   single nucleotide polymorphism; cyclin-dependent kinase 10; CDK10.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   variation       139
FT                   /*tag=  a
FT                   /note= "Single nucleotide polymorphism"
FT   variation       424
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FT                   /*tag= b
FT                   /note= "Single nucleotide polymorphism"
FT   variation       2898
FT                   /*tag= c
FT                   /note= "Single nucleotide polymorphism"
FT   variation       3166
FT                   /*tag= d
FT                   /note= "Single nucleotide polymorphism"
FT   variation       3501
FT                   /*tag= e
FT                   /note= "Single nucleotide polymorphism"
FT   variation       3525
FT                   /*tag= f
FT                   /note= "Single nucleotide polymorphism"
FT   variation       4165
FT                   /*tag= g
FT                   /note= "Single nucleotide polymorphism"
FT   variation       4647
FT                   /*tag= h
FT                   /note= "Single nucleotide polymorphism"
FT   variation       7960
FT                   /*tag= i
FT                   /note= "Single nucleotide polymorphism"
FT   variation       8081
FT                   /*tag= j
FT                   /note= "Single nucleotide polymorphism"
FT   variation       8194
FT                   /*tag= k
FT                   /note= "Single nucleotide polymorphism"
FT   variation       9640
FT                   /*tag= l
FT                   /note= "Single nucleotide polymorphism"
FT   variation       13285
FT                   /*tag= m
FT                   /note= "Single nucleotide polymorphism"
FT   variation       14845
FT                   /*tag= n
FT                   /note= "Single nucleotide polymorphism"
FT   variation       14933
FT                   /*tag= o
FT                   /note= "Single nucleotide polymorphism"
FT   variation       16275
FT                   /*tag= p
FT                   /note= "Single nucleotide polymorphism"
FT   variation       16586
FT                   /*tag= q
FT                   /note= "Single nucleotide polymorphism"
FT   variation       16824
FT                   /*tag= r
FT                   /note= "Single nucleotide polymorphism"
FT   variation       17564
FT                   /*tag= s
FT                   /note= "Single nucleotide polymorphism"
FT   variation       18077
FT                   /*tag= t
FT                   /note= "Single nucleotide polymorphism"
FT   variation       18435
FT                   /*tag= u
FT                   /note= "Single nucleotide polymorphism"
FT   variation       19300
FT                   /*tag= v
FT                   /note= "Single nucleotide polymorphism"
FT   variation       19488
FT                   /*tag= w
FT                   /note= "Single nucleotide polymorphism"
FT   variation       20864
FT                   /*tag= x
FT                   /note= "Single nucleotide polymorphism"
FT   variation       21176
FT                   /*tag= y
FT                   /note= "Single nucleotide polymorphism"
FT   variation       21338
FT                   /*tag= z
FT                   /note= "Single nucleotide polymorphism"
FT   variation       21343
FT                   /*tag= aa
FT                   /note= "Single nucleotide polymorphism"
FT   variation       21599
FT                   /*tag= ab
FT                   /note= "Single nucleotide polymorphism"
FT   variation       22081
FT                   /*tag= ac
FT                   /note= "Single nucleotide polymorphism"
FT   variation       23427
FT                   /*tag= ad
FT                   /note= "Single nucleotide polymorphism"
FT   variation       27153
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FT                   /note= "Single nucleotide polymorphism"
FT   variation       39762
FT                   /*tag= ak
FT                   /note= "Single nucleotide polymorphism"
FT   variation       40292
FT                   /*tag= al
FT                   /note= "Single nucleotide polymorphism"
FT   variation       40697
FT                   /*tag= am
FT                   /note= "Single nucleotide polymorphism"
FT   variation       40831
FT                   /*tag= an
FT                   /note= "Single nucleotide polymorphism"
FT   variation       41516
FT                   /*tag= ao
FT                   /note= "Single nucleotide polymorphism"
FT   variation       41955
FT                   /*tag= ap
FT                   /note= "Single nucleotide polymorphism"
FT   variation       42477
FT                   /*tag= aq
FT                   /note= "Single nucleotide polymorphism"
FT   variation       43164
FT                   /*tag= ar
FT                   /note= "Single nucleotide polymorphism"
FT   variation       43734
FT                   /*tag= as
FT                   /note= "Single nucleotide polymorphism"
FT   variation       44029
FT                   /*tag= at
FT                   /note= "Single nucleotide polymorphism"
FT   variation       44692
FT                   /*tag= au
FT                   /note= "Single nucleotide polymorphism"
FT   variation       44986
FT                   /*tag= av
FT                   /note= "Single nucleotide polymorphism"
FT   variation       46234
FT                   /*tag= aw
FT                   /note= "Single nucleotide polymorphism"
FT   variation       47754
FT                   /*tag= ax
FT                   /note= "Single nucleotide polymorphism"
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FT   variation       47914
FT                   /*tag=  ay
FT                   /note= "Single nucleotide polymorphism"
FT   variation       49672
FT                   /*tag=  az
FT                   /note= "Single nucleotide polymorphism"
FT   variation       50476
FT                   /*tag=  ba
FT                   /note= "Single nucleotide polymorphism"
FT   variation       50525
FT                   /*tag=  bb
FT                   /note= "Single nucleotide polymorphism"
FT   variation       50621
FT                   /*tag=  bc
FT                   /note= "Single nucleotide polymorphism"
FT   variation       53410
FT                   /*tag=  bd
FT                   /note= "Single nucleotide polymorphism"
FT   variation       53833
FT                   /*tag=  be
FT                   /note= "Single nucleotide polymorphism"
FT   variation       59632
FT                   /*tag=  bf
FT                   /note= "Single nucleotide polymorphism"
FT   variation       59646
FT                   /*tag=  bg
FT                   /note= "Single nucleotide polymorphism"
FT   variation       59667
FT                   /*tag=  bh
FT                   /note= "Single nucleotide polymorphism"
FT   variation       59676
FT                   /*tag=  bi
FT                   /note= "Single nucleotide polymorphism"
FT   variation       59678
FT                   /*tag=  bj

  Query Match             1.5%;  Score 46;  DB 12;  Length 99100;
  Best Local Similarity   100.0%;  Pred. No. 9.3e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||
Db      16521 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 16476


RESULT 104
ADX80723/c
ID   ADX80723 standard; DNA; 99250 BP.
XX
AC   ADX80723;
XX
DT   05-MAY-2005  (first entry)
XX
DE   Human cyclin-dependent kinase 10 (CDK10) genomic DNA.
XX
KW   melanoma; DNA polymorphism; SNP detection; cytostatic; gene therapy; SNP;
KW   single nucleotide polymorphism; gene; ds; chromosome 16.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   variation       234
FT                   /*tag=  a
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       519
FT                   /*tag=  b
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       2993
FT                   /*tag=  c
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       3261
FT                   /*tag=  d
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       3596
FT                   /*tag=  e
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       3620
FT                   /*tag=  f
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       4260
FT                   /*tag=  g
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       4742
FT                   /*tag=  h
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       8055
FT                   /*tag=  i
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       8176
FT                   /*tag=  j
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       8289
FT                   /*tag=  k
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       9735
FT                   /*tag=  l
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       13380
FT                   /*tag=  m
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       14940
FT                   /*tag=  n
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       15028
FT                   /*tag=  o
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       16370
FT                   /*tag=  p
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       16681
FT                   /*tag=  q
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       16919
FT                   /*tag=  r
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       17659
FT                   /*tag=  s
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       18172
FT                   /*tag=  t
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       18530
FT                   /*tag=  u
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       19395
FT                   /*tag=  v
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       19583
FT                   /*tag=  w
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       20959
FT                   /*tag=  x
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       21271
FT                   /*tag=  y
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       21433
FT                   /*tag=  z
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       21438
FT                   /*tag=  aa
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       21694
FT                   /*tag=  ab
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       22176
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FT                   /*tag=  ac
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       23522
FT                   /*tag=  ad
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       27248
FT                   /*tag=  ae
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       27630
FT                   /*tag=  af
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       27954
FT                   /*tag=  ag
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       33622
FT                   /*tag=  ah
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       34247
FT                   /*tag=  ai
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       36589
FT                   /*tag=  aj
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       38672
FT                   /*tag=  ak
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       39539
FT                   /*tag=  al
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       39846
FT                   /*tag=  am
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       40376
FT                   /*tag=  an
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       40781
FT                   /*tag=  ao
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       40915
FT                   /*tag=  ap
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       41600
FT                   /*tag=  aq
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       42039
FT                   /*tag=  ar
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       42561
FT                   /*tag=  as
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       43248
FT                   /*tag=  at
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       43818
FT                   /*tag=  au
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       44113
FT                   /*tag=  av
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       44126
FT                   /*tag=  aw
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       44544
FT                   /*tag=  ax
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       44776
FT                   /*tag=  ay
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       45070
FT                   /*tag=  az
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       46318
FT                   /*tag=  ba
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       47837
FT                   /*tag=  bb
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       47997
FT                   /*tag=  bc
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       48304
FT                   /*tag=  bd
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       49755
FT                   /*tag=  be
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       49992
FT                   /*tag=  bf
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       50260
FT                   /*tag=  bg
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       50559
FT                   /*tag=  bh
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       50608
FT                   /*tag=  bi
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       50704
FT                   /*tag=  bj
FT                   /standard_name= "Single nucleotide polymorphism"

  Query Match             1.5%;  Score 46;  DB 14;  Length 99250;
  Best Local Similarity   100.0%;  Pred. No. 9.3e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             ||||||||||||||||||||||||||||||||||||||||||||||
Db      16616 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 16571


RESULT 105
ADQ97818
ID   ADQ97818 standard; DNA; 109661 BP.
XX
AC   ADQ97818;
XX
DT   07-OCT-2004  (first entry)
XX
DE   Human cancer associated sequence HD11-002, SEQ ID 795.
XX
KW   Cytostatic; Gene Therapy; cancer; leukemia; lymphoma; Human; ds.
XX
OS   Homo sapiens.
XX
PN   WO2004060304-A2.
XX
PD   22-JUL-2004.
XX
PF   22-DEC-2003; 2003WO-US041389.
XX
PR   27-DEC-2002; 2002US-00330773.
XX
PA   (SAGR-) SAGRES DISCOVERY INC.
XX
PI   Morris DW,  Malandro MS;
XX
DR   WPI; 2004-543781/52.
XX
PT   New isolated cancer associated nucleic acids comprising at least 10
PT   contiguous nucleotides, useful for diagnosing, preventing and/or treating
PT   cancers such as leukemia and lymphoma.
XX
PS   Claim 1; SEQ ID NO 795; 199pp; English.
XX
CC   The present invention relates to cancer associated sequences (ADQ97025-
```

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CC   ADQ98004). The sequences are useful for the diagnosis, prevention and/or
CC   treatment of cancer, such as leukemia and lymphoma. Note: The sequence
CC   data for this patent did not form part of the printed specification, but
CC   was obtained in electronic formate directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 109661 BP; 30680 A; 19371 C; 19986 G; 35350 T; 0 U; 4274 Other;

  Query Match             1.5%;  Score 46;  DB 12;  Length 109661;
  Best Local Similarity   100.0%;  Pred. No. 9.3e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
             ||||||||||||||||||||||||||||||||||||||||||||||
Db      40304 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 40349


RESULT 106
ADG70447_1/c
Continuation (2 of 5) of ADG70447 from base 100001 (Human ANGE-CLLD8-CLLD7 hybrid gene.
WP Sequence split into 5 fragments  LOCUS ADG70447 Accession Adg70447
WP     Fragment Name      Begin     End
WP     ADG70447_0             1    110000
WP     ADG70447_1        100001    210000
WP     ADG70447_2        200001    310000
WP     ADG70447_3        300001    410000
WP     ADG70447_4        400001    410846

  Query Match             1.5%;  Score 46;  DB 10;  Length 110000;
  Best Local Similarity   100.0%;  Pred. No. 9.3e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             ||||||||||||||||||||||||||||||||||||||||||||||
Db      97599 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 97554


RESULT 107
ABZ79565_1/c
Continuation (2 of 5) of ABZ79565 from base 100001 (CLLD8 and NY-REN-34 encoding DNA. )
WP Sequence split into 5 fragments  LOCUS ABZ79565 Accession Abz79565
WP     Fragment Name      Begin     End
WP     ABZ79565_0             1    110000
WP     ABZ79565_1        100001    210000
WP     ABZ79565_2        200001    310000
WP     ABZ79565_3        300001    410000
WP     ABZ79565_4        400001    410846

  Query Match             1.5%;  Score 46;  DB 10;  Length 110000;
  Best Local Similarity   100.0%;  Pred. No. 9.3e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             ||||||||||||||||||||||||||||||||||||||||||||||
Db      97599 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 97554


RESULT 108
ADZ13631_0
WP Sequence split into 5 fragments  LOCUS ADZ13631 Accession Adz13631
WP     Fragment Name      Begin     End
WP     ADZ13631_0             1    110000
WP     ADZ13631_1        100001    210000
WP     ADZ13631_2        200001    310000
WP     ADZ13631_3        300001    410000
WP     ADZ13631_4        400001    420555
ID   ADZ13631 standard; DNA; 420555 BP.
XX
AC   ADZ13631;
XX
DT   16-JUN-2005  (first entry)
XX
DE   Human cancer-associated genomic DNA #99.
XX
KW   Diagnosis; DNA microarray; microarray; biochip; cancer; neoplasm;
KW   cytostatic; gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO2005031001-A2.
XX
PD   07-APR-2005.
XX
PF   23-SEP-2004; 2004WO-US031617.
XX
PR   23-SEP-2003; 2003US-00669920.
XX
PA   (CHIR ) CHIRON CORP.
XX
PI   Morris DW,  Malandro MS;
XX
DR   WPI; 2005-273395/28.
XX
PT   Nucleic acid array useful for detecting cancer associated nucleic acid,
PT   comprises two or more nucleic acid probes.
XX
PS   Disclosure; SEQ ID NO 1151; 198pp; English.
XX
CC   The invention relates to a nucleic acid array for detecting a cancer
CC   associated (CA) nucleic acid, comprising two or more nucleic acid probes.
CC   The invention also relates to a peptide array comprising two or more
CC   isolated polypeptides encoded by a CA nucleic acid sequence, a compound
CC   that binds to a polypeptide, an isolated antibody or its fragment which
CC   binds to a polypeptide, which is prepared by immunizing a host animal
CC   with a composition comprising the polypeptide or its antigen binding
CC   fragment and collecting cells from the host expressing antibodies against
CC   the antigen or its antigen binding fragment, a composition comprising the
CC   antibody and a carrier, a method of screening for anticancer activity, a
CC   method of detecting a CA nucleic acid, a method of diagnosing cancer, a
CC   method of treating cancer and a method of inhibiting expression of a CA
CC   nucleic acid in a cell. The CA nucleic acids are useful for detecting CA
CC   nucleic acids. The antibody is useful for detecting the presence or
CC   absence of cancer cells in an individual which involves contacting cells
CC   from the individual with the antibody and detecting a complex of a CA
CC   protein from the cancer cells and the antibody, where the detection of
CC   the complex correlates with the presence of cancer cells in the
CC   individual. The composition is useful for inhibiting growth of cancer
CC   cells in an individual or for delivering a therapeutic agent to cancer
CC   cells in an individual. The invention is also useful for diagnosing
CC   cancer, for treating cancer and for inhibiting expression of a CA gene in
CC   a cell. This sequence represents human cancer-associated genomic DNA of
CC   the invention.
XX
SQ   Sequence 420555 BP; 131028A; 77271C; 78657G; 131031T; 0U; 25680ther;

  Query Match             1.5%;  Score 46;  DB 14;  Length 110000;
  Best Local Similarity   100.0%;  Pred. No. 9.3e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3077 TGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             ||||||||||||||||||||||||||||||||||||||||||||||
Db      50592 TGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 50637


RESULT 109
ADZ13620_0
WP Sequence split into 5 fragments  LOCUS ADZ13620 Accession Adz13620
WP     Fragment Name      Begin     End
WP     ADZ13620_0             1    110000
WP     ADZ13620_1        100001    210000
WP     ADZ13620_2        200001    310000
WP     ADZ13620_3        300001    410000
WP     ADZ13620_4        400001    420555
ID   ADZ13620 standard; DNA; 420555 BP.
XX
AC   ADZ13620;
```

```
XX
DT   16-JUN-2005  (first entry)
XX
DE   Human cancer-associated genomic DNA #98.
XX
KW   Diagnosis; DNA microarray; microarray; biochip; cancer; neoplasm;
KW   cytostatic; gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO2005031001-A2.
XX
PD   07-APR-2005.
XX
PF   23-SEP-2004; 2004WO-US031617.
XX
PR   23-SEP-2003; 2003US-00669920.
XX
PA   (CHIR ) CHIRON CORP.
XX
PI   Morris DW,  Malandro MS;
XX
DR   WPI; 2005-273395/28.
XX
PT   Nucleic acid array useful for detecting cancer associated nucleic acid,
PT   comprises two or more nucleic acid probes.
XX
PS   Disclosure; SEQ ID NO 1140; 198pp; English.
XX
CC   The invention relates to a nucleic acid array for detecting a cancer
CC   associated (CA) nucleic acid, comprising two or more nucleic acid probes.
CC   The invention also relates to a peptide array comprising two or more
CC   isolated polypeptides encoded by a CA nucleic acid sequence, a compound
CC   that binds to a polypeptide, an isolated antibody or its fragment which
CC   binds to a polypeptide, which is prepared by immunizing a host animal
CC   with a composition comprising the polypeptide or its antigen binding
CC   fragment and collecting cells from the host expressing antibodies against
CC   the antigen or its antigen binding fragment, a composition comprising the
CC   antibody and a carrier, a method of screening for anticancer activity, a
CC   method of detecting a CA nucleic acid, a method of diagnosing cancer, a
CC   method of treating cancer and a method of inhibiting expression of a CA
CC   nucleic acid in a cell. The CA nucleic acids are useful for detecting CA
CC   nucleic acids. The antibody is useful for detecting the presence or
CC   absence of cancer cells in an individual which involves contacting cells
CC   from the individual with the antibody and detecting a complex of a CA
CC   protein from the cancer cells and the antibody, where the detection of
CC   the complex correlates with the presence of cancer cells in the
CC   individual. The composition is useful for inhibiting growth of cancer
CC   cells in an individual or for delivering a therapeutic agent to cancer
CC   cells in an individual. The invention is also useful for diagnosing
CC   cancer, for treating cancer and for inhibiting expression of a CA gene in
CC   a cell. This sequence represents human cancer-associated genomic DNA of
CC   the invention.
XX
SQ   Sequence 420555 BP; 131028A; 77271C; 78657G; 131031T; 0U; 2568Other;

  Query Match             1.5%;  Score 46;  DB 14;  Length 110000;
  Best Local Similarity   100.0%;  Pred. No. 9.3e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3077 TGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             ||||||||||||||||||||||||||||||||||||||||||||||
Db      50592 TGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 50637


RESULT 110
ADZ13747_2/c
Continuation (3 of 4) of ADZ13747 from base 200001 (Human cancer-associated genomic DNA
WP Sequence split into 4 fragments  LOCUS ADZ13747 Accession Adz13747
WP     Fragment Name      Begin     End
WP     ADZ13747_0             1    110000
WP     ADZ13747_1        100001    210000
WP     ADZ13747_2        200001    310000
WP     ADZ13747_3        300001    365720

  Query Match             1.5%;  Score 46;  DB 14;  Length 110000;
  Best Local Similarity   100.0%;  Pred. No. 9.3e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             ||||||||||||||||||||||||||||||||||||||||||||||
Db      73741 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 73696


RESULT 111
AAD54480
ID   AAD54480 standard; DNA; 117962 BP.
XX
AC   AAD54480;
XX
DT   26-JUN-2003  (first entry)
XX
DE   Human CIP DNA #1.
XX
KW   Human; p53 pathway; chloride cotransporter interactor protein; CIP;
KW   angiogenic disorder; cell proliferation disorder; apoptotic disorder;
KW   breast cancer; gene therapy; ds.
XX
OS   Homo sapiens.
XX
PN   WO200299055-A2.
XX
PD   12-DEC-2002.
XX
PF   03-JUN-2002; 2002WO-US017473.
XX
PR   05-JUN-2001; 2001US-0296076P.
PR   10-OCT-2001; 2001US-0328605P.
PR   15-FEB-2002; 2002US-0357253P.
XX
PA   (EXEL-) EXELIXIS INC.
XX
PI   Friedman L,  Plowman GD,  Belvin M,  Francis-Lang H,  Li D,  Funke RP;
XX
DR   WPI; 2003-175140/17.
XX
PT   Identifying p53 pathway modulators for treating or diagnosing disorders
PT   with defective p53 function e.g. breast cancer, by providing an assay
PT   system having a purified cotransporter interactor protein (CIP)
PT   polypeptide or nucleic acid.
XX
PS   Disclosure; Page 38-101; 123pp; English.
XX
CC   The invention relates to a method of Identifying p53 pathway modulating
CC   agent. The method involves contacting a test agent with an assay system
CC   comprising a purified cation Cl- cotransporter interactor protein (CIP)
CC   polypeptide or polynucleotide, or their functionally active fragment or
CC   derivative. The method is useful for identifying modulators of the p53
CC   pathway particularly for identifying agents for treating disorders (e.g.
CC   breast cancer) associated with defective p53 function. Modulators of the
CC   invention are useful as targets for novel therapeutics. CIP sequences are
CC   useful as modifiers of the p53 pathway, and as therapeutic targets for
CC   disorders associated with defective p53 function e.g. angiogenic,
CC   apoptotic or cell proliferation disorders. The invention is useful in
CC   gene therapy. The present sequence is human CIP DNA
XX
SQ   Sequence 117962 BP; 27840 A; 32096 C; 30624 G; 27402 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 46;  DB 8;  Length 117962;
  Best Local Similarity   100.0%;  Pred. No. 9.3e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             ||||||||||||||||||||||||||||||||||||||||||||||
Db      18398 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 18443
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RESULT 112
ACN43862
ID   ACN43862 standard; DNA; 141463 BP.
XX
AC   ACN43862;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Human genomic sequence hCG21073.
XX
KW   Cytostatic; carcinoma; lymphoma; cancer; human; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003073826-A2.
XX
PD   12-SEP-2003.
XX
PF   28-FEB-2003; 2003WO-US006235.
XX
PR   01-MAR-2002; 2002US-00087192.
XX
PA   (SAGR-) SAGRES DISCOVERY.
XX
PI   Morris DW;
XX
DR   WPI; 2003-328604/31.
XX
PT   Recombinant nucleic acid useful for diagnosis and treatment of carcinoma
PT   comprises a nucleotide sequence.
XX
PS   Claim 1; SEQ ID NO 22; 0pp; English.
XX
CC   The present invention relates to novel DNA and protein sequences which
CC   are associated with carcinomas. The sequences are useful for: (i) for
CC   screening drug candidates; (ii) for screening of bioactive agent capable
CC   of binding to Carcinoma Associated Protein (CAP); (iii) for screening of
CC   a bioactive agent capable of modulating the activity of CAP; (iv) for
CC   evaluating the effect of a candidate carcinoma drug; (v) for diagnosing
CC   carcinoma; (vi) for inhibiting the activity of CAP; (vii) for treating
CC   carcinoma; (viii) for neutralizing the effect of CAP; (ix) as a biochip;
CC   (x) for diagnosing carcinoma or a propensity to carcinoma; and (xi) for
CC   determining Carcinoma Associated (CA) gene copy number. In addition, the
CC   CA genes are useful as DNA vaccines and the CAP are useful as markers of
CC   carcinoma including lymphoma. The present sequence is one such CA coding
CC   sequence. Note: This patent is an equivalent to basic patent
CC   US2002182586A1, for which no sequence data was published
XX
SQ   Sequence 141463 BP; 40336 A; 28306 C; 29237 G; 43584 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 46;  DB 11;  Length 141463;
  Best Local Similarity   100.0%;  Pred. No. 9.2e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||
Db      73703 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 73748


RESULT 113
ADC87620/c
ID   ADC87620 standard; DNA; 144792 BP.
XX
AC   ADC87620;
XX
DT   01-JAN-2004  (first entry)
XX
DE   Human GPCR related polynucleotide SEQ ID NO:2073.
XX
KW   ds; human; GPCR; guanosine triphosphate-binding protein coupled receptor;
KW   gene therapy.
XX
OS   Homo sapiens.
XX
PN   EP1270724-A2.
XX
PD   02-JAN-2003.
XX
PF   18-JUN-2002; 2002EP-00013517.
XX
PR   18-JUN-2001; 2001JP-00246789.
XX
PA   (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
PA   (ADSC-) CENT ADVANCED SCI & TECHNOLOGY INCUBATIO.
XX
PI   Suwa M,  Asai K,  Akiyama Y,  Aburatani H;
XX
DR   WPI; 2003-315783/31.
XX
PT   New polynucleotide, useful for preparing a composition for treating a
PT   patient in need of increased or suppressed activity or expression of the
PT   guanosine triphosphate-binding protein coupled receptor.
XX
PS   Disclosure; SEQ ID NO 2073; 28pp; English.
XX
CC   The invention relates to a novel polynucleotide encoding a guanosine
CC   triphosphate-binding protein coupled receptor (GPCR). A polynucleotide of
CC   the invention may have a use in gene therapy. The polynucleotide and
CC   polypeptide are useful for preparing a composition for treating a patient
CC   in need of increased or suppressed activity or expression of the
CC   guanosine triphosphate-binding protein coupled receptor. The protein
CC   sequences shown in ADC87618-ADC87623 represent polynucleotide sequences
CC   related to the invention.
XX
SQ   Sequence 144792 BP; 39827 A; 32142 C; 33413 G; 39310 T; 0 U; 100 Other;

  Query Match             1.5%;  Score 46;  DB 10;  Length 144792;
  Best Local Similarity   100.0%;  Pred. No. 9.2e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||
Db      60793 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 60748


RESULT 114
ADL13904/c
ID   ADL13904 standard; DNA; 164772 BP.
XX
AC   ADL13904;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Osteoarthritis-associated polymorphic nucleotide #436.
XX
KW   ds; gene; osteopathic; antiinflammatory; antiarthritic; gene therapy;
KW   joint space narrowing; osteophyte development; joint pain;
KW   osteoarthritis; SNP; single nucleotide polymorphism.
XX
OS   Homo sapiens.
XX
PN   WO2003054166-A2.
XX
PD   03-JUL-2003.
XX
PF   19-DEC-2002; 2002WO-US041225.
XX
PR   20-DEC-2001; 2001US-0342603P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Jones KA,  Schafer A;
XX
DR   WPI; 2003-559141/52.
XX
```

PT Determining susceptibility of an individual to joint space narrowing,
PT osteophyte development and/or joint pain comprises identifying whether
PT the individual has at least one polymorphism in a polynucleotide encoding
PT a protein.
XX
PS Disclosure; SEQ ID NO 436; 297pp; English.
XX
CC The invention relates to a method of determining susceptibility of an
CC individual to joint space narrowing and/or osteophyte development and/or
CC joint pain comprising identifying whether the individual has at least one
CC polymorphism in a polynucleotide encoding at least one of the protein
CC listed in the specification. The methods, composition and agent are
CC useful for modulating the susceptibility of an individual to joint space
CC narrowing and/or osteophyte development and/or joint pain that is
CC associated with a disease, preferably osteoarthritis. The cell line and
CC the non-human animal are useful for screening for an agent for diagnosing
CC an individual having susceptibility to joint space narrowing and/or
CC osteophyte development and/or joint pain. This sequence corresponds to
CC the polynucleotide encoding a protein listed in the specification. (Note:
CC The sequence data for this patent did not form part of the printed
CC specification but was obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences).
XX
SQ Sequence 164772 BP; 50645 A; 32137 C; 31960 G; 50022 T; 0 U; 8 Other;

Query Match 1.5%; Score 46; DB 10; Length 164772;
Best Local Similarity 100.0%; Pred. No. 9.2e-11;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
||||||||||||||||||||||||||||||||||||||||||||||
Db 111876 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 111831

RESULT 115
ACN44262
ID ACN44262 standard; DNA; 168821 BP.
XX
AC ACN44262;
XX
DT 18-NOV-2004 (first entry)
XX
DE Human genomic sequence hCG18035.
XX
KW Cytostatic; carcinoma; lymphoma; cancer; human; gene; ss.
XX
OS Homo sapiens.
XX
PN WO2003073826-A2.
XX
PD 12-SEP-2003.
XX
PF 28-FEB-2003; 2003WO-US006235.
XX
PR 01-MAR-2002; 2002US-00087192.
XX
PA (SAGR-) SAGRES DISCOVERY.
XX
PI Morris DW;
XX
DR WPI; 2003-328604/31.
XX
PT Recombinant nucleic acid useful for diagnosis and treatment of carcinoma
PT comprises a nucleotide sequence.
XX
PS Claim 1; SEQ ID NO 622; 0pp; English.
XX
CC The present invention relates to novel DNA and protein sequences which
CC are associated with carcinomas. The sequences are useful for: (i) for
CC screening drug candidates; (ii) for screening of bioactive agent capable
CC of binding to Carcinoma Associated Protein (CAP); (iii) for screening of
CC a bioactive agent capable of modulating the activity of CAP; (iv) for
CC evaluating the effect of a candidate carcinoma drug; (v) for diagnosing
CC carcinoma; (vi) for inhibiting the activity of CAP; (vii) for treating
CC carcinoma; (viii) for neutralizing the effect of CAP; (ix) as a biochip;
CC (x) for diagnosing carcinoma or a propensity to carcinoma; and (xi) for
CC determining Carcinoma Associated (CA) gene copy number. In addition, the
CC CA genes are useful as DNA vaccines and the CAP are useful as markers of
CC carcinoma including lymphoma. The present sequence is one such CA coding
CC sequence. Note: This patent is an equivalent to basic patent
CC US2002182586A1, for which no sequence data was published
XX
SQ Sequence 168821 BP; 39588 A; 43389 C; 45655 G; 40189 T; 0 U; 0 Other;

Query Match 1.5%; Score 46; DB 11; Length 168821;
Best Local Similarity 100.0%; Pred. No. 9.1e-11;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
||||||||||||||||||||||||||||||||||||||||||||||
Db 161763 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 161808

RESULT 116
ADL13935
ID ADL13935 standard; DNA; 177866 BP.
XX
AC ADL13935;
XX
DT 06-MAY-2004 (first entry)
XX
DE Osteoarthritis-associated polymorphic nucleotide #467.
XX
KW ds; gene; osteopathic; antiinflammatory; antiarthritic; gene therapy;
KW joint space narrowing; osteophyte development; joint pain;
KW osteoarthritis; SNP; single nucleotide polymorphism.
XX
OS Homo sapiens.
XX
PN WO2003054166-A2.
XX
PD 03-JUL-2003.
XX
PF 19-DEC-2002; 2002WO-US041225.
XX
PR 20-DEC-2001; 2001US-0342603P.
XX
PA (INCY-) INCYTE GENOMICS INC.
XX
PI Jones KA, Schafer A;
XX
DR WPI; 2003-559141/52.
XX
PT Determining susceptibility of an individual to joint space narrowing,
PT osteophyte development and/or joint pain comprises identifying whether
PT the individual has at least one polymorphism in a polynucleotide encoding
PT a protein.
XX
PS Disclosure; SEQ ID NO 467; 297pp; English.
XX
CC The invention relates to a method of determining susceptibility of an
CC individual to joint space narrowing and/or osteophyte development and/or
CC joint pain comprising identifying whether the individual has at least one
CC polymorphism in a polynucleotide encoding at least one of the protein
CC listed in the specification. The methods, composition and agent are
CC useful for modulating the susceptibility of an individual to joint space
CC narrowing and/or osteophyte development and/or joint pain that is
CC associated with a disease, preferably osteoarthritis. The cell line and
CC the non-human animal are useful for screening for an agent for diagnosing
CC an individual having susceptibility to joint space narrowing and/or
CC osteophyte development and/or joint pain. This sequence corresponds to
CC the polynucleotide encoding a protein listed in the specification. (Note:
CC The sequence data for this patent did not form part of the printed
CC specification but was obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences).
XX

```
SQ   Sequence 177866 BP; 53227 A; 36632 C; 36825 G; 51154 T; 0 U; 28 Other;

  Query Match             1.5%;  Score 46;  DB 10;  Length 177866;
  Best Local Similarity   100.0%;  Pred. No. 9.1e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
             |||||||||||||||||||||||||||||||||||||||||||||
Db     166193 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 166238


RESULT 117
ADF69677
ID   ADF69677 standard; DNA; 181257 BP.
XX
AC   ADF69677;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human SLC5A8 gene SEQ ID NO:2.
XX
KW   human; SLC5A8; cell surface protein; cytostatic; gene therapy;
KW   SLC5A8-associated cancer; colon cancer; breast cancer; thyroid cancer;
KW   stomach cancer; cancer; chromosome 12; gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003104427-A2.
XX
PD   18-DEC-2003.
XX
PF   05-JUN-2003; 2003WO-US018239.
XX
PR   05-JUN-2002; 2002US-0386653P.
XX
PA   (UYCA-) UNIV CASE WESTERN RESERVE.
XX
PI   Markowitz SD;
XX
DR   WPI; 2004-062348/06.
XX
PT   New SLC5A8 polypeptide, useful for detecting and treating SLC5A8-
PT   associated cancer, e.g. colon, breast, thyroid or stomach cancer.
XX
PS   Claim 6; SEQ ID NO 2; 207pp; English.
XX
CC   The present invention describes the human SLC5A8 protein (I), which is a
CC   cell surface protein. (I) has cytostatic activity, and can be used in
CC   gene therapy. (I) can be used in detecting and treating SLC5A8-associated
CC   cancer, e.g. colon cancer, breast cancer, thyroid cancer or stomach
CC   cancer. (I) is also useful in screening assays, predictive medicine and
CC   in diagnostic and prognostic assays. The human SLC5A8 gene is located on
CC   chromosome 12. The present sequence is used in the exemplification of the
CC   present invention.
XX
SQ   Sequence 181257 BP; 53237 A; 35656 C; 35971 G; 56393 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 46;  DB 12;  Length 181257;
  Best Local Similarity   100.0%;  Pred. No. 9.1e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
             |||||||||||||||||||||||||||||||||||||||||||||
Db      99600 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 99645


RESULT 118
ABQ75562
ID   ABQ75562 standard; DNA; 188888 BP.
XX
AC   ABQ75562;
XX
DT   11-NOV-2002  (first entry)
XX
DE   Human related CYP 27C1 clone RP11-30F3 SEQ ID NO:21.
XX
KW   Cloning; characterisation; human; cytochrome P450; CYP 27C1; cytostatic;
KW   thyromimetic; antidiabetic; antipsoriatic; tuberculostatic; osteopathic;
KW   dermatological; antilipaemic; gene therapy; vaccine; Vitamin D; diabetes;
KW   vitamin D metabolite deficiency; hyperparathyroidism; hypoparathyroidism;
KW   medullary carcinoma; psoriasis; sarcoidosis; tuberculosis; osteomalacia;
KW   chronic renal disease; vitamin D dependent rickets; anticonvulsant;
KW   fibrogenesis imperfecta ossium; osteititis fibrosa cystica; osteoporosis;
KW   osteopaenia; osteosclerosis; renal osteodystrophy; rickets; steatorrhoea;
KW   glucocorticoid antagonism; idiopathic hypercalcaemia; tropical sprue;
KW   malabsorption syndrome; cholesterol steroid; lipid metabolic disorder;
KW   gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO200264765-A2.
XX
PD   22-AUG-2002.
XX
PF   11-FEB-2002; 2002WO-CA000163.
XX
PR   09-FEB-2001; 2001US-0267410P.
XX
PA   (CYTO-) CYTOCHROMA INC.
XX
PI   Wisniewski J;
XX
DR   WPI; 2002-657595/70.
XX
PT   New nucleic acid molecules encoding cytochrome P450 proteins, human CYP
PT   27C1 and a hybrid homologs from Xenopus laevis, useful for treating
PT   diseases related to vitamin D or vitamin D metabolite deficiency, e.g.
PT   parathyroidism and diabetes.
XX
PS   Example 1; Fig 1A; 209pp; English.
XX
CC   The present invention describes an isolated nucleic acid molecule (I)
CC   encoding human cytochrome P450, CYP 27C1, and a hybrid homologue from
CC   Xenopus laevis. (I) has thyromimetic, antidiabetic, cytostatic,
CC   antipsoriatic, tuberculostatic, osteopathic, dermatological and
CC   antilipaemic activities, and can be used in gene therapy and in vaccines.
CC   The nucleic acid molecules, proteins and methods from the present
CC   invention are useful for treating diseases related to vitamin D or
CC   vitamin D metabolite deficiency, e.g. hyper- and hypo-parathyroidism,
CC   Osudohypo-parathyroidism, Secondary hyperparathyroidism, diabetes,
CC   medullary carcinoma, psoriasis, sarcoidosis, tuberculosis, chronic renal
CC   disease, hypophosphatemic VDRR, vitamin D dependent rickets,
CC   anticonvulsant treatment, fibrogenesis imperfecta ossium, osteititis
CC   fibrosa cystica, osteomalacia, osteoporosis, osteopaenia, osteosclerosis,
CC   renal osteodystrophy, rickets, glucocorticoid antagonism, idiopathic
CC   hypercalcaemia, malabsorption syndrome, steatorrhoea, and tropical sprue,
CC   or cholesterol, steroid and other lipid metabolic disorders. The present
CC   sequence represents a human related CYP 27C1 clone designated RP11-30F3,
CC   which is given in an example from the present invention
XX
SQ   Sequence 188888 BP; 51055 A; 42661 C; 43560 G; 47708 T; 0 U; 3904 Other;

  Query Match             1.5%;  Score 46;  DB 6;  Length 188888;
  Best Local Similarity   100.0%;  Pred. No. 9.1e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
             |||||||||||||||||||||||||||||||||||||||||||||
Db     142425 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 142470


RESULT 119
ADL13570/c
ID   ADL13570 standard; DNA; 193672 BP.
XX
AC   ADL13570;
```

XX
DT 06-MAY-2004 (first entry)
XX
DE Osteoarthritis-associated polymorphic nucleotide #102.
XX
KW ds; gene; osteopathic; antiinflammatory; antiarthritic; gene therapy;
KW joint space narrowing; osteophyte development; joint pain;
KW osteoarthritis; SNP; single nucleotide polymorphism.
XX
OS Homo sapiens.
XX
PN WO2003054166-A2.
XX
PD 03-JUL-2003.
XX
PF 19-DEC-2002; 2002WO-US041225.
XX
PR 20-DEC-2001; 2001US-0342603P.
XX
PA (INCY-) INCYTE GENOMICS INC.
XX
PI Jones KA, Schafer A;
XX
DR WPI; 2003-559141/52.
XX
PT Determining susceptibility of an individual to joint space narrowing,
PT osteophyte development and/or joint pain comprises identifying whether
PT the individual has at least one polymorphism in a polynucleotide encoding
PT a protein.
XX
PS Disclosure; SEQ ID NO 102; 297pp; English.
XX
CC The invention relates to a method of determining susceptibility of an
CC individual to joint space narrowing and/or osteophyte development and/or
CC joint pain comprising identifying whether the individual has at least one
CC polymorphism in a polynucleotide encoding at least one of the protein
CC listed in the specification. The methods, composition and agent are
CC useful for modulating the susceptibility of an individual to joint space
CC narrowing and/or osteophyte development and/or joint pain that is
CC associated with a disease, preferably osteoarthritis. The cell line and
CC the non-human animal are useful for screening for an agent for diagnosing
CC an individual having susceptibility to joint space narrowing and/or
CC osteophyte development and/or joint pain. This sequence corresponds to
CC the polynucleotide encoding a protein listed in the specification. (Note:
CC The sequence data for this patent did not form part of the printed
CC specification but was obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences).
XX
SQ Sequence 193672 BP; 43026 A; 54282 C; 51944 G; 43718 T; 0 U; 702 Other;

Query Match 1.5%; Score 46; DB 10; Length 193672;
Best Local Similarity 100.0%; Pred. No. 9.1e-11;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
||||||||||||||||||||||||||||||||||||||||||||||
Db 3015 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 2970

RESULT 120
ACN44650
ID ACN44650 standard; DNA; 256157 BP.
XX
AC ACN44650;
XX
DT 18-NOV-2004 (first entry)
XX
DE Human genomic sequence hCG38672.
XX
KW Cytostatic; carcinoma; lymphoma; cancer; human; gene; ss.
XX
OS Homo sapiens.
XX
PN WO2003073826-A2.
XX
PD 12-SEP-2003.
XX
PF 28-FEB-2003; 2003WO-US006235.
XX
PR 01-MAR-2002; 2002US-00087192.
XX
PA (SAGR-) SAGRES DISCOVERY.
XX
PI Morris DW;
XX
DR WPI; 2003-328604/31.
XX
PT Recombinant nucleic acid useful for diagnosis and treatment of carcinoma
PT comprises a nucleotide sequence.
XX
PS Claim 1; SEQ ID NO 1204; 0pp; English.
XX
CC The present invention relates to novel DNA and protein sequences which
CC are associated with carcinomas. The sequences are useful for: (i) for
CC screening drug candidates; (ii) for screening of bioactive agent capable
CC of binding to Carcinoma Associated Protein (CAP); (iii) for screening of
CC a bioactive agent capable of modulating the activity of CAP; (iv) for
CC evaluating the effect of a candidate carcinoma drug; (v) for diagnosing
CC carcinoma; (vi) for inhibiting the activity of CAP; (vii) for treating
CC carcinoma; (viii) for neutralizing the effect of CAP; (ix) as a biochip;
CC (x) for diagnosing carcinoma or a propensity to carcinoma; and (xi) for
CC determining Carcinoma Associated (CA) gene copy number. In addition, the
CC CA genes are useful as DNA vaccines and the CAP are useful as markers of
CC carcinoma including lymphoma. The present sequence is one such CA coding
CC sequence. Note: This patent is an equivalent to basic patent
CC US2002182586A1, for which no sequence data was published
XX
SQ Sequence 256157 BP; 70370 A; 54568 C; 55511 G; 73304 T; 0 U; 2404 Other;

Query Match 1.5%; Score 46; DB 11; Length 256157;
Best Local Similarity 100.0%; Pred. No. 9e-11;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
||||||||||||||||||||||||||||||||||||||||||||||
Db 192749 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 192794

RESULT 121
ABD33570
ID ABD33570 standard; DNA; 256157 BP.
XX
AC ABD33570;
XX
DT 18-NOV-2004 (first entry)
XX
DE Human cancer-associated (CA) gene HD07-114.
XX
KW Human; cancer-associated protein; CAP; cancer-associated gene; CA; gene;
KW ds; cancer; cytostatic.
XX
OS Homo sapiens.
XX
PN WO2004058146-A2.
XX
PD 15-JUL-2004.
XX
PF 15-DEC-2003; 2003WO-US040081.
XX
PR 17-DEC-2002; 2002US-00322281.
XX
PA (SAGR-) SAGRES DISCOVERY INC.
XX
PI Morris DW, Malandro MS;
XX
DR WPI; 2004-499109/47.

XX
PT Novel human cancer associated protein encoded within open reading frame
PT of cancer associated gene, useful as targets for diagnosing cancer.
XX
PS Claim 16; SEQ ID NO 776; 182pp; English.
XX
CC The invention relates to cancer-associated proteins (CAP) and the cancer-
CC associated (CA) nucleic acids encoding them. The invention also relates
CC to a method for treating cancers involving administering to a patient an
CC inhibitor of CAP, and a method of screening for anticancer activity in a
CC potential drug involving providing a cell that expresses a CA gene,
CC contacting a tissue sample derived from a cancer cell with an anticancer
CC drug candidate and monitoring the effect of the anticancer drug candidate
CC on expression of the CA gene. The CAP proteins are useful for detecting
CC cancer associated with expression of a CAP protein in a test cell sample
CC and for screening for a bioactive agent capable of modulating the
CC activity of a CAP protein. The CA nucleic acids are useful for diagnosing
CC cancer, involving determining the expression of a CA nucleic acid in a
CC tissue. This sequence represents a human CA gene of the invention. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 256157 BP; 70370 A; 54568 C; 55511 G; 73304 T; 0 U; 2404 Other;

Query Match 1.5%; Score 46; DB 13; Length 256157;
Best Local Similarity 100.0%; Pred. No. 9e-11;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 2940
||||||||||||||||||||||||||||||||||||||||||||||
Db 192749 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACAT 192794

RESULT 122
ACN44350
ID ACN44350 standard; DNA; 276276 BP.
XX
AC ACN44350;
XX
DT 18-NOV-2004 (first entry)
XX
DE Human genomic sequence hCG17121.
XX
KW Cytostatic; carcinoma; lymphoma; cancer; human; gene; ss.
XX
OS Homo sapiens.
XX
PN WO2003073826-A2.
XX
PD 12-SEP-2003.
XX
PF 28-FEB-2003; 2003WO-US006235.
XX
PR 01-MAR-2002; 2002US-00087192.
XX
PA (SAGR-) SAGRES DISCOVERY.
XX
PI Morris DW;
XX
DR WPI; 2003-328604/31.
XX
PT Recombinant nucleic acid useful for diagnosis and treatment of carcinoma
PT comprises a nucleotide sequence.
XX
PS Claim 1; SEQ ID NO 754; 0pp; English.
XX
CC The present invention relates to novel DNA and protein sequences which
CC are associated with carcinomas. The sequences are useful for: (i) for
CC screening drug candidates; (ii) for screening of bioactive agent capable
CC of binding to Carcinoma Associated Protein (CAP); (iii) for screening of
CC a bioactive agent capable of modulating the activity of CAP; (iv) for
CC evaluating the effect of a candidate carcinoma drug; (v) for diagnosing
CC carcinoma; (vi) for inhibiting the activity of CAP; (vii) for treating
CC carcinoma; (viii) for neutralizing the effect of CAP; (ix) as a biochip;
CC (x) for diagnosing carcinoma or a propensity to carcinoma; and (xi) for
CC determining Carcinoma Associated (CA) gene copy number. In addition, the
CC CA genes are useful as DNA vaccines and the CAP are useful as markers of
CC carcinoma including lymphoma. The present sequence is one such CA coding
CC sequence. Note: This patent is an equivalent to basic patent
CC US2002182586A1, for which no sequence data was published
XX
SQ Sequence 276276 BP; 68379 A; 69211 C; 66764 G; 71922 T; 0 U; 0 Other;

Query Match 1.5%; Score 46; DB 11; Length 276276;
Best Local Similarity 100.0%; Pred. No. 9e-11;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2888 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGG 2933
||||||||||||||||||||||||||||||||||||||||||||||
Db 212141 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGG 212186

RESULT 123
ADQ59440/c
ID ADQ59440 standard; DNA; 347814 BP.
XX
AC ADQ59440;
XX
DT 07-OCT-2004 (first entry)
XX
DE Human cancer-associated (CA) gene sequence SEQ ID NO:76.
XX
KW human; cancer-associated gene; cancer-associated protein; cytostatic;
KW gene therapy; vaccine; tyrosine kinase antagonist;
KW G-protein coupled receptor antagonist; cancer; lymphoma; gene; ds.
XX
OS Homo sapiens.
XX
PN WO2004058288-A1.
XX
PD 15-JUL-2004.
XX
PF 15-DEC-2003; 2003WO-US040082.
XX
PR 17-DEC-2002; 2002US-00322696.
XX
PA (SAGR-) SAGRES DISCOVERY INC.
XX
PI Morris DW, Malandro MS;
XX
DR WPI; 2004-543349/52.
DR P-PSDB; ADQ59442.
XX
PT New cancer-associated nucleic acid for diagnosing, preventing or treating
PT cancer (e.g. lymphoma) or for screening agents that may be used for
PT treating or preventing cancer.
XX
PS Claim 16; SEQ ID NO 76; 143pp; English.
XX
CC The present invention describes human cancer-associated (CA) nucleotide
CC sequences (I). Also described: (1) an expression vector comprising (I);
CC (2) a host cell comprising (I) or the expression vector; (3) a microarray
CC for detecting a CA nucleic acid; (4) an isolated polypeptide encoded
CC within an open reading frame of a CA sequence; (5) an isolated antibody,
CC or its antigen binding fragment, that binds to the above polypeptide; (6)
CC a hybridoma that produces the monoclonal antibody described above; (7) a
CC pharmaceutical composition comprising the antibody and a pharmaceutical
CC excipient; (8) a kit for detecting or diagnosing cancer cells, comprising
CC the above (monoclonal) antibody or polynucleotide that selectively
CC hybridises to any of the polynucleotide sequences mentioned above; (9)
CC methods for diagnosing cancer or for detecting the presence or absence of
CC cancer cells in an individual; (10) a method for inhibiting growth of
CC cancer cells in an individual; (11) a method for delivering a therapeutic
CC agent to cancer cells in an individual; (12) an electronic library
CC comprising the polynucleotide or polypeptide, or their fragments,

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CC   mentioned above; (13) a method of screening for anticancer activity; (14)
CC   methods for detecting cancer associated with expression of a polypeptide
CC   or the presence of the antibody in a test cell or serum sample; (15) a
CC   method for screening for a bioactive agent capable of modulating the
CC   activity of a CA protein encoded by the abbve nucleic acid molecule; and
CC   (16) a method for treating cancers. (I) has cytostatic activity, and can
CC   be used in gene therapy, in vaccines, as a tyrosine kinase antagonist,
CC   and as a G-protein coupled receptor antagonist. The compositions and
CC   methods of the present invention can be used for diagnosing, preventing
CC   and treating cancer, especially lymphomas. They may also be used in
CC   screening for agents that may be used for treating or preventing cancer.
CC   The present sequence represents a human CA gene sequence, which is given
CC   in the exemplification of the present invention. Note: The sequence data
CC   for this patent did not form part of the printed specification, but was
CC   obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 347814 BP; 109468 A; 63155 C; 63484 G; 111535 T; 0 U; 172 Other;

  Query Match             1.5%;  Score 46;  DB 12;  Length 347814;
  Best Local Similarity   100.0%;  Pred. No. 8.9e-11;
  Matches   46;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 3116
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Db     261007 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTC 260962


RESULT 124
AAS27638/c
ID   AAS27638 standard; DNA; 145 BP.
XX
AC   AAS27638;
XX
DT   07-NOV-2001  (first entry)
XX
DE   DNA encoding novel signal transduction pathway protein, Seq ID 1298.
XX
KW   Neuroprotective; cytostatic; dermatological; immunosuppressive; tumour;
KW   antiinflammatory; anti-HIV; antibacterial; antiinflammatory; cancer;
KW   immune system disorder; rheumatoid arthritis; inflammatory condition;
KW   organ transplant rejection; infection; hepatitis C; blood disorder;
KW   sickle cell anaemia; hyperproliferative disorder; Gaucher's disease;
KW   neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW   chromosomal abnormality; Down syndrome; ischaemia; renal disorder;
KW   cardiovascular; respiratory; wound healing; endocrine; Addison's disease;
KW   reproductive system; gastrointestinal; liver disorder; AIDS; ds;
KW   acquired immune deficiency syndrome.
XX
OS   Homo sapiens.
XX
PN   WO200154733-A1.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001312.
XX
PR   31-JAN-2000; 2000US-0179065P.
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PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
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PR   01-SEP-2000; 2000US-0229287P.
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PR   27-SEP-2000; 2000US-0235834P.
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PR   02-OCT-2000; 2000US-0236802P.
PR   02-OCT-2000; 2000US-0237037P.
PR   02-OCT-2000; 2000US-0237038P.
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PR   01-NOV-2000; 2000US-0244617P.
PR   08-NOV-2000; 2000US-0246474P.
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PR 08-NOV-2000; 2000US-0246475P.
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PR 08-NOV-2000; 2000US-0246524P.
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PR 08-NOV-2000; 2000US-0246527P.
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PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-465460/50.
XX
PT Novel polypeptides useful for diagnosing, treating, preventing and/or
PT prognosing disorders related to the proteins, including cancers, immune
PT disorders and neuronal disorders.
XX
PS Claim 1; SEQ ID NO 1298; 880pp; English.
XX
CC The invention relates to novel isolated polypeptides (I), and
CC polynucleotides (II). (I), (II) and the antibody to (I) are useful for
CC diagnosing, preventing and treating diseases including immune system
CC disorders (e.g. congenital and acquired immunodeficiencies, autoimmune
CC disorders (e.g rheumatoid arthritis), inflammatory conditions, organ
CC transplant rejections and graft versus host disease, infectious diseases
CC (e.g. hepatitis C), bleeding disorders, haemoglobin abnormalities and
CC other blood-related disorders (sickle cell anaemia), myeloproliferative
CC disorders, primary haematopoietic disorders, hyperproliferative disorders
CC (e.g. Gaucher's disease and cancer), neurodegenerative disorders (e.g.
CC Alzheimer's disease, Parkinson's disease), chromosomal abnormalities
CC (Down syndrome), ischaemic injury (e.g. stroke), renal disorders (e.g.
CC glomerulonephritis), cardiovascular disorders (e.g. arrhythmia),
CC respiratory disorders, dermatological disorders, in wound healing,
CC epithelial cell proliferation, endocrine disorders (e.g. Addison's
CC disease), reproductive system disorders, gastrointestinal disorder
CC (inflammatory disorders), liver disorders (cirrhosis), as stimulators of
CC B-cell responsiveness to pathogens, activators of T-cells, to induce
CC higher affinity antibodies, and as a means to induce tumour proliferation
CC in pathologies e.g. acquired immune deficiency syndrome (AIDS). AAS26976-
CC AAS27850 represent novel signal transduction pathway protein coding
CC sequences and PCR primers of the invention
XX
SQ Sequence 145 BP; 13 A; 36 C; 21 G; 75 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 4; Length 145;
Best Local Similarity 100.0%; Pred. No. 3.4e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db 120 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 76

RESULT 125
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ID AAK68506 standard; DNA; 145 BP.
XX
AC AAK68506;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human immune/haematopoietic antigen genomic sequence SEQ ID NO:23318.
XX
KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS Homo sapiens.
XX
PN WO200157182-A2.
XX
PD 09-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001354.
XX
PR 31-JAN-2000; 2000US-0179065P.
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PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 23318; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 145 BP; 75 A; 21 C; 36 G; 13 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 4; Length 145;
Best Local Similarity 100.0%; Pred. No. 3.4e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db 26 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 70

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RESULT 126
AAK69250
ID   AAK69250 standard; DNA; 145 BP.
XX
AC   AAK69250;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:24062.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
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PR   17-NOV-2000; 2000US-0249264P.
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PR   17-NOV-2000; 2000US-0249299P.
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PR   01-DEC-2000; 2000US-0250160P.
PR   01-DEC-2000; 2000US-0250391P.
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PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
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PR 08-DEC-2000; 2000US-0251856P.
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PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 24062; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 145 BP; 75 A; 21 C; 36 G; 13 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 4; Length 145;
Best Local Similarity 100.0%; Pred. No. 3.4e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 26 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 70

RESULT 127
ABK44042
ID ABK44042 standard; DNA; 145 BP.
XX
AC ABK44042;
XX
DT 05-JUN-2002 (first entry)
XX
DE Genomic DNA encoding novel central nervous system protein #244.
XX
KW Central nervous system; CNS; autoimmune disease; rheumatoid arthritis;
KW hyperproliferative disorder; neoplasm; cardiovascular disorder;
KW cardiac arrest; cerebrovascular disorder; ischaemia; angiogenesis;
KW nervous system disorder; Alzheimer's disease; AIDS; ocular disorder;
KW acquired immunodeficiency virus; dysphagia; gastrointestinal disorder;
KW adenocarcinoma; reproductive system disorder; testicular feminisation;
KW endocrine disorder; diabetes; cancer; leukaemia; neovascularisation;
KW respiratory disorder; renal disorder; kidney failure; blood disorder;
KW myocardial infarction; wound healing; cell proliferation; skin aging;
KW food additive; food preservative; gene therapy; gene; ds.
XX
OS Homo sapiens.
XX
PN WO200155318-A2.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001332.
XX
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PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
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PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-581633/65.
XX
PT New isolated nucleic acid encoding a protein for diagnosing, preventing,
PT treating or ameliorating medical conditions and used as food additives or
PT preservatives.
XX
PS Disclosure; SEQ ID NO 1230; 837pp; English.
XX
CC The invention describes an isolated nucleic acid molecule (I) encoding a
CC novel central nervous system protein. (I) and polypeptides (III) encoded
CC by (I), are used to treat a medical conditions and in diagnosis of a
CC pathological condition. Disorders which are diagnosed or treated include
CC autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative
CC disorders e.g. neoplasms of the breast or liver, cardiovascular disorders
CC e.g. cardiac arrest, cerebrovascular disorders e.g. cerebral ischaemia,
CC angiogenesis, nervous system disorders e.g. Alzheimer's disease and
CC amylotrophic lateral sclerosis, infections caused by bacteria, viruses
CC e.g. Acquired immunodeficiency virus (AIDS) and fungi, ocular disorders
CC e.g. corneal infection, gastrointestinal disorders e.g. dysphagia,
CC adenocarcinomas and irritable bowel syndrome, reproductive system
CC disorders e.g. testicular feminisation, endocrine disorders e.g. diabetes
CC and pituitary dwarfism, cancers and disorders at the cellular level e.g.
CC leukaemia, disorders involving neovascularisation e.g. malignancies,
CC respiratory disorders e.g. nonallergic rhinitis, renal disorders e.g.
CC acute kidney failure and blood related disorders e.g. myocardial
CC infarction. The polypeptides can also be used to aid wound healing and
CC epithelial cell proliferation, to prevent skin aging due to sunburn, to
CC maintain organs before transplantation, for supporting cell culture of
CC primary tissues, to regenerate tissues and in chemotaxis. The
CC polypeptides can also be used as a food additive or preservative to
CC increase or decrease storage capabilities, fat content, lipid, protein,
CC carbohydrate, vitamins, minerals, cofactors and other nutritional

Query Match 1.4%; Score 45; DB 4; Length 145;
Best Local Similarity 100.0%; Pred. No. 3.4e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db 26 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 70

RESULT 128
ADB94441/c
ID ADB94441 standard; DNA; 145 BP.
XX
AC ADB94441;
XX
DT 04-DEC-2003 (first entry)
XX
DE Novel human protein DNA #50.
XX
KW ds; gene; human; autoimmune disease; Parkinson's disease; silicosis;
KW gastrointestinal disease; atherosclerosis; haemophilia; thrombocytopenia;
KW immunosuppressive agent; adjuvant; enhance immune response;
KW higher affinity antibody induction;
KW increased serum immunoglobulin concentration.
XX
OS Homo sapiens.
XX
PN US2002168711-A1.
XX
PD 14-NOV-2002.
XX
PF 17-JAN-2001; 2001US-00764868.
XX
PR 31-JAN-2000; 2000US-0179065P.
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PR 28-JUN-2000; 2000US-0214886P.
PR 07-JUL-2000; 2000US-0216647P.

PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
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PR 14-AUG-2000; 2000US-0225270P.
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PR 01-SEP-2000; 2000US-0229344P.
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PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 08-SEP-2000; 2000US-0231413P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
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PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
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PR 13-OCT-2000; 2000US-0239935P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241809P.
PR 01-NOV-2000; 2000US-0244617P.
PR 17-NOV-2000; 2000US-0249299P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
XX
PA (ROSE/) ROSEN C A.
PA (RUBE/) RUBEN S M.
PA (BARA/) BARASH S C.
XX
PI Rosen CA, Ruben SM, Barash SC;
XX
DR WPI; 2003-719985/68.
XX
PT New isolated polypeptide useful for diagnosing and treating
PT immunosuppressive conditions such as autoimmune disease and Parkinson's
PT disease.
XX
PS Disclosure; SEQ ID NO 1298; 345pp; English.
XX
CC The invention relates to an isolated polypeptide. The polypeptide is
CC useful for diagnosing a pathological condition or a susceptibility to a
CC pathological condition in a subject, by determining the presence or
CC amount of expression of the polypeptide in a biological sample and
CC diagnosing a pathological condition or a susceptibility to a pathological
CC condition based on the presence or amount of expression of the
CC polypeptide. The polypeptide is also useful for identifying a binding
CC partner to the polypeptide, which involves contacting the polypeptide
CC with a binding partner and determining whether the binding partner
CC effects an activity of the polypeptide. The polypeptide or the nucleic
CC acid encoding the polypeptide is useful for preventing, treating, or
CC ameliorating a medical condition, which involves administering the
CC polypeptide or the nucleic acid to a mammalian subject. The nucleic acid
CC is useful for diagnosing a pathological condition or a susceptibility to
CC a pathological condition in a subject, which involves determining the
CC presence or absence of a mutation in The nucleic acid, and diagnosing a
CC pathological condition or susceptibility to a pathological condition
CC based on the presence or absence of the mutation. The polypeptide, the
CC nucleic acid and an antibody to the polypeptide are useful for treating
CC autoimmune disease, Parkinson's disease, silicosis, gastrointestinal
CC disease, atherosclerosis, haemophilia, thrombocytopenia. The polypeptide,
CC the nucleic acid and the antibody are useful as immunosuppressive agents,
CC as adjuvants to enhance immune responses, and as agents to induce higher
CC affinity antibodies and increase serum immunoglobulin concentrations. The
CC present sequence represents DNA encoding a novel human protein. Note: The
CC sequence data for this patent did not form part of the printed
CC specification but was obtained in electronic format direct from USPTO at
CC seqdata.uspto.gov/sequence.html?DocID=20020168711.
XX
SQ Sequence 145 BP; 13 A; 36 C; 21 G; 75 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 10; Length 145;
Best Local Similarity 100.0%; Pred. No. 3.4e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 120 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 76

RESULT 129
ADI55027
ID ADI55027 standard; DNA; 145 BP.
XX
AC ADI55027;
XX
DT 22-APR-2004 (first entry)
XX
DE Novel human protein genomic DNA seq id 1230.
XX
KW neuroprotective; nootropic; antiparkinsonian; anticonvulsant;
KW antidiabetic; antirheumatic; antiarthritic; dermatological;
KW antiinflammatory; immunosuppressive; antithyroid; antianemic; vasotropic;
KW anti-HIV; hepatotropic; virucide; antibacterial; fungicide;
KW antiparasitic; muscular; gynaecological; gastrointestinal; respiratory;
KW cardiovascular-; antiarteriosclerotic; antiarrhythmic; cardiant;
KW nephrotropic; litholytic; cytostatic; gene therapy; neural disorder;
KW Alzheimer's disease; Parkinson's disease; Huntington's chorea;
KW amyotrophic lateral sclerosis; multiple sclerosis;
KW immune system disorder; diabetes; rheumatoid arthritis;
KW systemic lupus erythematosus; autoimmune thyroiditis; haemolytic anaemia;
KW inflammatory disorder; ischaemia-reperfusion injury;
KW inflammatory bowel disease; Crohn's disease; infectious disease;
KW HIV infection; hepatitis infection; bacterial infection;
KW fungal infection; parasitic infection; muscular disorder;
KW reproductive disorder; gastrointestinal disorder; pulmonary disorder;
KW cardiovascular disorder; atherosclerosis; arrhythmia; myocarditis;
KW renal disorder; acute glomerulonephritis; pyelonephritis;
KW renal lithiasis; proliferative disorder; cancerous diseases; human; ds.
XX
OS Homo sapiens.
XX
PN US2004018969-A1.
XX
PD 29-JAN-2004.
XX
PF 17-JAN-2001; 2001US-00764875.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.

PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
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PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
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PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
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PR 18-AUG-2000; 2000US-0226279P.
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PR 06-SEP-2000; 2000US-0230438P.
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PR 14-SEP-2000; 2000US-0232399P.
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PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
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PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (ROSE/) ROSEN C A.
PA (RUBE/) RUBEN S M.
PA (BARA/) BARASH S C.
XX
PI Rosen CA, Ruben SM, Barash SC;
XX
DR WPI; 2004-122079/12.
XX
PT New polypeptides and nucleic acid molecules, useful for detecting,
PT preventing, diagnosing, prognosticating, treating or ameliorating medical
PT conditions e.g. neural disorders, reproductive disorders or infectious
PT diseases.
XX
PS Disclosure; SEQ ID NO 1230; 413pp; English.
XX
CC The invention describes an isolated polypeptide comprising an amino acid

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CC   sequence at least 90% identical to: a polypeptide fragment, domain,
CC   epitope, or full-length protein of any one of 607 amino acid sequences
CC   (I) described in the specification; a polypeptide fragment of (I), or the
CC   encoded sequence contained in (II), having biological activity; or a
CC   variant, allelic variant, or a species homologue of (I). The polypeptides
CC   and nucleic acid molecules are useful for detecting, preventing,
CC   diagnosing, prognosticating, treating or ameliorating medical conditions
CC   such as neural disorders, e.g. Alzheimer's disease, Parkinson's disease,
CC   Huntington's chorea, amyotrophic lateral sclerosis or multiple sclerosis,
CC   immune system disorders, e.g. diabetes, rheumatoid arthritis, systemic
CC   lupus erythematosus, autoimmune thyroiditis or haemolytic anaemia,

  Query Match             1.4%;  Score 45;  DB 12;  Length 145;
  Best Local Similarity   100.0%;  Pred. No. 3.4e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             |||||||||||||||||||||||||||||||||||||||||||||
Db         26 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 70


RESULT 130
ACH37117
ID   ACH37117 standard; cDNA; 492 BP.
XX
AC   ACH37117;
XX
DT   13-OCT-2003  (first entry)
XX
DE   Human endothelial cell cDNA #5250.
XX
KW   Human; ss; sequencing by hybridisation; SBH; expressed sequence tag; EST;
KW   genome mapping; biodiversity; genetic disorder.
XX
OS   Homo sapiens.
XX
PN   US2003073623-A1.
XX
PD   17-APR-2003.
XX
PF   30-JUL-2001; 2001US-00918995.
XX
PR   30-JUL-2001; 2001US-00918995.
XX
PA   (DRMA/) DRMANAC R T.
PA   (LABA/) LABAT I.
PA   (STAC/) STACHE-CRAIN B.
PA   (DICK/) DICKSON M C.
PA   (JONE/) JONES L W.
XX
PI   Drmanac RT,  Labat I,  Stache-Crain B,  Dickson MC,  Jones LW;
XX
DR   WPI; 2003-615964/58.
XX
PT   New polynucleotide sequences obtained from various cDNA libraries, useful
PT   as hybridization probes, as oligomers for PCR, for chromosome and gene
PT   mapping, in the recombinant production of protein, or in generating
PT   antisense DNA or RNA.
XX
PS   Claim 1; SEQ ID NO 24329; 44pp; English.
XX
CC   The invention relates to an isolated polynucleotide comprising any one of
CC   38043 cDNA sequences, appearing as ACH12789-ACH50831, whose sequence was
CC   determined by the technique of SBH (sequencing by hybridisation). Also
CC   included is a purified polypeptide comprising a sequence corresponding to
CC   a reading frame of the novel polynucleotide. The nucleic acid sequences
CC   are useful in diagnostics as expressed sequence tags (EST) for
CC   identifying expressed genes or for physical mapping of the human genome,
CC   in forensics, in assessing biodiversities, or in identifying mutations
CC   responsible for genetic disorders and other traits. The nucleotide
CC   sequences are also useful as hybridisation probes, as oligomers for PCR,
CC   for chromosome and gene mapping, in the recombinant production of
CC   protein, or in generating antisense DNA or RNA. The purified polypeptide
CC   is useful for generating antibodies specific for it. The present sequence
CC   is one of the 38043 isolated cDNA/EST sequences. Note: The sequence data
CC   for this patent did not form part of the printed specification, but was
CC   obtained in electronic format directly from USPTO at
CC   seqdata.uspto.gov/sequence.html?DocID=20030073623
XX
SQ   Sequence 492 BP; 121 A; 128 C; 137 G; 106 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 9;  Length 492;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2888 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTG 2932
             |||||||||||||||||||||||||||||||||||||||||||||
Db        366 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTG 410


RESULT 131
AAH13294/c
ID   AAH13294 standard; cDNA; 568 BP.
XX
AC   AAH13294;
XX
DT   26-JUN-2001  (first entry)
XX
DE   Human cDNA clone (3'-primer) SEQ ID NO:10129.
XX
KW   Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
XX
OS   Homo sapiens.
XX
PN   EP1074617-A2.
XX
PD   07-FEB-2001.
XX
PF   28-JUL-2000; 2000EP-00116126.
XX
PR   29-JUL-1999;   99JP-00248036.
PR   27-AUG-1999;   99JP-00300253.
PR   11-JAN-2000; 2000JP-00118776.
PR   02-MAY-2000; 2000JP-00183767.
PR   09-JUN-2000; 2000JP-00241899.
XX
PA   (HELI-) HELIX RES INST.
XX
PI   Ota T,  Isogai T,  Nishikawa T,  Hayashi K,  Saito K,  Yamamoto J;
PI   Ishii S,  Sugiyama T,  Wakamatsu A,  Nagai K,  Otsuki T;
XX
DR   WPI; 2001-318749/34.
XX
PT   Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT   length cDNAs defined in the specification, and for the detection and/or
PT   diagnosis of the abnormality of the proteins encoded by the full-length
PT   cDNAs.
XX
PS   Claim 3; SEQ ID NO 10129; 2537pp + Sequence Listing; English.
XX
CC   The present invention describes primer sets for synthesising 5602 full-
CC   length cDNAs defined in the specification. Where a primer set comprises:
CC   (a) an oligo-dT primer and an oligonucleotide complementary to the
CC   complementary strand of a polynucleotide which comprises one of the 5602
CC   nucleotide sequences defined in the specification, where the
CC   oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC   of an oligonucleotide comprising a sequence complementary to the
CC   complementary strand of a polynucleotide which comprises a 5'-end
CC   sequence and an oligonucleotide comprising a sequence complementary to a
CC   polynucleotide which comprises a 3'-end sequence, where the
CC   oligonucleotide comprises at least 15 nucleotides and the combination of
CC   the 5'-end sequence/3'-end sequence is selected from those defined in the
CC   specification. The primer sets can be used in antisense therapy and in
CC   gene therapy. The primers are useful for synthesising polynucleotides,
CC   particularly full-length cDNAs. The primers are also useful for the
CC   detection and/or diagnosis of the abnormality of the proteins encoded by
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CC   the full-length cDNAs. The primers allow obtaining of the full-length
CC   cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC   AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC   represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC   oligonucleotides, all of which are used in the exemplification of the
CC   present invention
XX
SQ   Sequence 568 BP; 139 A; 144 C; 119 G; 163 T; 0 U; 3 Other;

  Query Match             1.4%;  Score 45;  DB 4;  Length 568;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
              |||||||||||||||||||||||||||||||||||||||||||||
Db         47 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3


RESULT 132
AEB33439
ID   AEB33439 standard; DNA; 601 BP.
XX
AC   AEB33439;
XX
DT   08-SEP-2005  (first entry)
XX
DE   Human DNA polymorphic region #1019.
XX
KW   SNP detection; diagnosis; non-insulin dependent diabetes; obesity;
KW   antidiabetic; anorectic; endocrine disease; gastrointestinal disease;
KW   metabolic disorder; nutritional disorder; single nucleotide polymorphism;
KW   SNP; ds.
XX
OS   Homo sapiens.
XX
PN   US2005147987-A1.
XX
PD   07-JUL-2005.
XX
PF   19-JUL-2004; 2004US-00893315.
XX
PR   08-SEP-2000; 2000US-0231397P.
PR   10-SEP-2001; 2001US-00948947.
XX
PA   (APPL-) APPLERA CORP NY.
XX
PI   Venter JC,  Zhang JN,  Liu X,  Rowe W,  Cravchik A,  Kalush F;
PI   Naik A,  Subramanian G,  Woodage T;
XX
DR   WPI; 2005-511776/52.
XX
PT   New detection reagent capable of detecting 1, 100, 500, 1000 or 5000 or
PT   more single nucleic acid polymorphisms, useful in identifying an
PT   individual having or at risk of developing type II diabetes or obesity.
XX
PS   Claim 13; SEQ ID NO 1202; 31pp; English.
XX
CC   The invention relates to a detection reagent capable of detecting one or
CC   more single nucleic acid polymorphisms. The invention also relates to
CC   determining whether a trait is linked to one of the human chromosomes or
CC   its sub-region, a computer readable medium having stored in it the SNP
CC   relational information given in the specification, an isolated nucleic
CC   acid molecule for detecting at least one SNP given in the specification
CC   comprising at least about 12 contiguous nucleotides, genotyping at least
CC   one SNP position given in the specification in a sample, identifying an
CC   individual having or at risk of developing a disorder and a kit
CC   comprising at least one container containing the detection reagent.
CC   Determining whether a trait is linked to one of the human chromosomes or
CC   its sub-region comprises determining whether the trait is linked to one
CC   or more SNPs using the detection reagents. Genotyping at least one SNP
CC   position given in the specification in a sample comprises contacting the
CC   sample with a detection reagent that differentiates between alternative
CC   alleles at at least one SNP position given in the specification, and
CC   determining which allele is present at the at least one SNP position.
CC   Identifying an individual having or at risk of developing a disorder
CC   comprises genotyping at least one SNP given in the specification in a
CC   nucleic acid sample from the individual. The disorder is type II diabetes
CC   (non-insulin dependent diabetes) or obesity. The detection reagent is
CC   useful in identifying an individual having or at risk of developing a
CC   disorder, particularly type II diabetes or obesity. This sequence
CC   represents a human DNA polymorphic region used in the scope of the
CC   invention. Note: The sequence data for this patent did not form part of
CC   the printed specification but was obtained in electronic format from
CC   USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ   Sequence 601 BP; 174 A; 133 C; 164 G; 129 T; 0 U; 1 Other;

  Query Match             1.4%;  Score 45;  DB 14;  Length 601;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACA 2939
              |||||||||||||||||||||||||||||||||||||||||||||
Db        202 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACA 246


RESULT 133
AAK63029
ID   AAK63029 standard; cDNA; 1664 BP.
XX
AC   AAK63029;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen encoding cDNA SEQ ID NO:8089.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
PR   16-MAR-2000; 2000US-0189874P.
PR   17-MAR-2000; 2000US-0190076P.
PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
PR   14-JUL-2000; 2000US-0218290P.
PR   26-JUL-2000; 2000US-0220963P.
PR   26-JUL-2000; 2000US-0220964P.
PR   14-AUG-2000; 2000US-0224518P.
PR   14-AUG-2000; 2000US-0224519P.
PR   14-AUG-2000; 2000US-0225213P.
PR   14-AUG-2000; 2000US-0225214P.
PR   14-AUG-2000; 2000US-0225266P.
PR   14-AUG-2000; 2000US-0225267P.
PR   14-AUG-2000; 2000US-0225268P.
PR   14-AUG-2000; 2000US-0225270P.
PR   14-AUG-2000; 2000US-0225447P.
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PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
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PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
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PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
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XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
DR P-PSDB; AAM90248.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Claim 1; SEQ ID NO 8089; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 1664 BP; 549 A; 335 C; 391 G; 376 T; 0 U; 13 Other;

Query Match 1.4%; Score 45; DB 4; Length 1664;
Best Local Similarity 100.0%; Pred. No. 3.2e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2898 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 2942
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ID   AAK69886 standard; DNA; 2219 BP.
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DT   06-NOV-2001  (first entry)
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DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:24698.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
XX
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PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 24698; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 2219 BP; 633 A; 508 C; 519 G; 559 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 4; Length 2219;
Best Local Similarity 100.0%; Pred. No. 3.1e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1966 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTG 2010

RESULT 135
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ID AAK69885 standard; DNA; 2219 BP.
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AC AAK69885;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human immune/haematopoietic antigen genomic sequence SEQ ID NO:24697.
XX
KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS Homo sapiens.
XX
PN WO200157182-A2.
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PR   05-JAN-2001; 2001US-0259678P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-483426/52.
XX
PT   Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS   Disclosure; SEQ ID NO 24697; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting the
CC   nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 2219 BP; 633 A; 508 C; 519 G; 559 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 4;  Length 2219;
  Best Local Similarity   100.0%;  Pred. No. 3.1e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db       1966 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTG 2010


RESULT 136
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XX
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XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:41068.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
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PR   16-MAR-2000; 2000US-0189874P.
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PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
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PR   26-JUL-2000; 2000US-0220963P.
PR   26-JUL-2000; 2000US-0220964P.
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PR 14-AUG-2000; 2000US-0224518P.
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PR 14-AUG-2000; 2000US-0225213P.
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PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
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PR 22-AUG-2000; 2000US-0226681P.
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PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
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PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
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PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
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PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
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PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
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PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
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PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 41068; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169

```
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 2219 BP; 559 A; 519 C; 508 G; 633 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 4;  Length 2219;
  Best Local Similarity   100.0%;  Pred. No. 3.1e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2888 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTG 2932
              |||||||||||||||||||||||||||||||||||||||||||||
Db        254 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTG 210


RESULT 137
AAK86257/c
ID   AAK86257 standard; DNA; 2219 BP.
XX
AC   AAK86257;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:41069.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
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PR   02-MAR-2000; 2000US-0186350P.
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PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
PR   14-JUL-2000; 2000US-0218290P.
PR   26-JUL-2000; 2000US-0220963P.
PR   26-JUL-2000; 2000US-0220964P.
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PR   14-AUG-2000; 2000US-0225268P.
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PR   14-AUG-2000; 2000US-0225758P.
PR   14-AUG-2000; 2000US-0225759P.
PR   18-AUG-2000; 2000US-0226279P.
PR   22-AUG-2000; 2000US-0226681P.
PR   22-AUG-2000; 2000US-0226868P.
PR   22-AUG-2000; 2000US-0227182P.
PR   23-AUG-2000; 2000US-0227009P.
PR   30-AUG-2000; 2000US-0228924P.
PR   01-SEP-2000; 2000US-0229287P.
PR   01-SEP-2000; 2000US-0229343P.
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PR   27-SEP-2000; 2000US-0235836P.
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PR   29-SEP-2000; 2000US-0236369P.
PR   29-SEP-2000; 2000US-0236370P.
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PR   13-OCT-2000; 2000US-0239937P.
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PR   08-NOV-2000; 2000US-0246609P.
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PR   08-NOV-2000; 2000US-0246613P.
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PR   17-NOV-2000; 2000US-0249209P.
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PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
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PR 01-DEC-2000; 2000US-0250160P.
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PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
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PR 08-DEC-2000; 2000US-0251868P.
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PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 41069; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 2219 BP; 559 A; 519 C; 508 G; 633 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 4; Length 2219;
Best Local Similarity 100.0%; Pred. No. 3.1e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2888 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTG 2932
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Db 254 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTG 210

RESULT 138
ADR07058
ID ADR07058 standard; cDNA; 2491 BP.
XX
AC ADR07058;
XX
DT 04-NOV-2004 (first entry)
XX
DE Full length human cDNA useful for treating neurological disease Seq 564.
XX
KW gene; ss; human; oligo-capping method; diagnostic marker; gene therapy;
KW osteoporosis; neurological disease; Alzheimer's disease;
KW Parkinson's disease; dementia; short memory; cancer;
KW sense or motor function; emotional reaction; fear response; panic;
KW osteopathic; neuroprotective; nootropic; antiparkinsonian; cytostatic;
KW tranquiliser.
XX
OS Homo sapiens.
XX
PN EP1447413-A2.
XX
PD 18-AUG-2004.
XX
PF 12-FEB-2004; 2004EP-00003145.
XX
PR 14-FEB-2003; 2003JP-00102207.
PR 09-MAY-2003; 2003JP-00131452.
XX
PA (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI Isogai T, Yamamoto J, Nishikawa T, Isono Y, Sugiyama T, Otsuki T;
PI Wakamatsu A, Ishii S, Nagai K, Irie R;
XX
DR WPI; 2004-583265/57.
DR P-PSDB; ADR09014.
XX
PT New 1995 cDNA, useful for treating osteoporosis, neurological diseases,
PT Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.
XX
PS Claim 1; SEQ ID NO 564; 2686pp; English.
XX
CC This invention relates to novel, isolated full length human cDNA
CC molecules and the encoded proteins thereof. Specifically, it refers to
CC cDNA clones obtained by an oligo-capping method, where none of these
CC clones are identical to any known human mRNAs. The present invention
CC describes an immunoassay to identify agonists and antagonists, as well as
CC antibodies, antisense molecules and siRNAs that can all be used to bind
CC to and modulate expression of the cDNA molecules. As such, these
CC molecules are useful for diagnostic markers or therapeutic targets for
CC the various diseases or morbid states. In particular, they are useful in
CC gene therapy for treating osteoporosis, neurological disease, Alzheimer's
CC disease, Parkinson's disease, dementia, short memory and various cancers,
CC as well as for maintaining equilibrium of sense or motor function, and
CC for treating emotional reaction, fear response and panic. Accordingly,
CC they exhibit osteopathic, neuroprotective, nootropic, antiparkinsonian,
CC cytostatic and tranquiliser activities. This polynucleotide is a full
CC length human cDNA sequence of the invention. NOTE: This sequence is not
CC given in the sequence listing of the specification but can be obtained on
CC CD-ROM from the European Patent Office, Vienna Sub-office.
XX
SQ Sequence 2491 BP; 509 A; 639 C; 794 G; 549 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 13; Length 2491;
Best Local Similarity 100.0%; Pred. No. 3.1e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
||||||||||||||||||||||||||||||||||||||||||||
Db 2447 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 2491

RESULT 139
AAH18230
ID AAH18230 standard; cDNA; 3977 BP.
XX
AC AAH18230;
XX
DT 26-JUN-2001 (first entry)
XX
DE Human cDNA sequence SEQ ID NO:18165.
XX

KW Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
XX
OS Homo sapiens.
XX
PN EP1074617-A2.
XX
PD 07-FEB-2001.
XX
PF 28-JUL-2000; 2000EP-00116126.
XX
PR 29-JUL-1999; 99JP-00248036.
PR 27-AUG-1999; 99JP-00300253.
PR 11-JAN-2000; 2000JP-00118776.
PR 02-MAY-2000; 2000JP-00183767.
PR 09-JUN-2000; 2000JP-00241899.
XX
PA (HELI-) HELIX RES INST.
XX
PI Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
XX
DR WPI; 2001-318749/34.
XX
PT Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT length cDNAs defined in the specification, and for the detection and/or
PT diagnosis of the abnormality of the proteins encoded by the full-length
PT cDNAs.
XX
PS Claim 8; SEQ ID NO 18165; 2537pp + Sequence Listing; English.
XX
CC The present invention describes primer sets for synthesising 5602 full-
CC length cDNAs defined in the specification. Where a primer set comprises:
CC (a) an oligo-dT primer and an oligonucleotide complementary to the
CC complementary strand of a polynucleotide which comprises one of the 5602
CC nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in the
CC specification. The primer sets can be used in antisense therapy and in
CC gene therapy. The primers are useful for synthesising polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC oligonucleotides, all of which are used in the exemplification of the
CC present invention
XX
SQ Sequence 3977 BP; 1063 A; 888 C; 987 G; 1039 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 4; Length 3977;
Best Local Similarity 100.0%; Pred. No. 3.1e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
||||||||||||||||||||||||||||||||||||||||||||||
Db 3931 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3975

RESULT 140
AAK69446/c
ID AAK69446 standard; DNA; 4513 BP.
XX
AC AAK69446;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human immune/haematopoietic antigen genomic sequence SEQ ID NO:24258.
XX
KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS Homo sapiens.
XX
PN WO200157182-A2.
XX
PD 09-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001354.
XX
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 24258; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 4513 BP; 897 A; 1168 C; 1278 G; 1170 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 4; Length 4513;
Best Local Similarity 100.0%; Pred. No. 3e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCT 3117
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Db 2386 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCT 2342

RESULT 141
AAL03041/c
ID AAL03041 standard; DNA; 6565 BP.
XX
AC AAL03041;
XX
DT 21-NOV-2001 (first entry)
XX
DE Human reproductive system related antigen DNA SEQ ID NO: 5729.
XX
KW Human; reproductive system related antigen; reproductive system disorder;
KW cancer; gene therapy; ds.
XX
OS Homo sapiens.
XX
PN WO200155320-A2.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001339.
XX
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PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-465570/50.
XX
PT Isolated nucleic acid molecule encoding a reproductive system antigen is
PT used in preventing, treating or ameliorating a medical condition.
XX
PS Disclosure; SEQ ID NO 5729; 1297pp + Sequence Listing; English.
XX
CC The present invention provides the protein and coding sequences of a
CC number of human reproductive system related antigens. These can be used
CC in the prevention and treatment of reproductive system disorders,
CC including cancer. The present sequence is a genomic sequence encoding a
CC protein of the invention
XX
SQ Sequence 6565 BP; 1349 A; 1951 C; 1910 G; 1355 T; 0 U; 0 Other;

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  Query Match             1.4%;  Score 45;  DB 4;  Length 6565;
  Best Local Similarity   100.0%;  Pred. No. 3e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db       5140 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 5096


RESULT 142
AAL03042/c
ID   AAL03042 standard; DNA; 6565 BP.
XX
AC   AAL03042;
XX
DT   21-NOV-2001  (first entry)
XX
DE   Human reproductive system related antigen DNA SEQ ID NO: 5730.
XX
KW   Human; reproductive system related antigen; reproductive system disorder;
KW   cancer; gene therapy; ds.
XX
OS   Homo sapiens.
XX
PN   WO200155320-A2.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001339.
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PR   31-JAN-2000; 2000US-0179065P.
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PR   08-NOV-2000; 2000US-0246532P.
PR   08-NOV-2000; 2000US-0246609P.
PR   08-NOV-2000; 2000US-0246610P.
PR   08-NOV-2000; 2000US-0246611P.
PR   08-NOV-2000; 2000US-0246613P.
PR   17-NOV-2000; 2000US-0249207P.
PR   17-NOV-2000; 2000US-0249208P.
PR   17-NOV-2000; 2000US-0249209P.
PR   17-NOV-2000; 2000US-0249210P.
PR   17-NOV-2000; 2000US-0249211P.
PR   17-NOV-2000; 2000US-0249212P.
PR   17-NOV-2000; 2000US-0249213P.
PR   17-NOV-2000; 2000US-0249214P.
PR   17-NOV-2000; 2000US-0249215P.
PR   17-NOV-2000; 2000US-0249216P.
PR   17-NOV-2000; 2000US-0249217P.
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PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-465570/50.
XX
PT Isolated nucleic acid molecule encoding a reproductive system antigen is
PT used in preventing, treating or ameliorating a medical condition.
XX
PS Disclosure; SEQ ID NO 5730; 1297pp + Sequence Listing; English.
XX
CC The present invention provides the protein and coding sequences of a
CC number of human reproductive system related antigens. These can be used
CC in the prevention and treatment of reproductive system disorders,
CC including cancer. The present sequence is a genomic sequence encoding a
CC protein of the invention
XX
SQ Sequence 6565 BP; 1349 A; 1951 C; 1910 G; 1355 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 4; Length 6565;
Best Local Similarity 100.0%; Pred. No. 3e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
||||||||||||||||||||||||||||||||||||||||||||||
Db 5140 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 5096

RESULT 143
ABL97378/c
ID ABL97378 standard; DNA; 6565 BP.
XX
AC ABL97378;
XX
DT 21-JUN-2002 (first entry)
XX
DE Human testicular antigen encoding DNA fragment SEQ ID NO: 2030.
XX
KW Human; testicular antigen; testes; cancer; metastasis; immune disorder;
KW reproductive system disorder; urinary system disorder; gene therapy;
KW cardiovascular disorder; respiratory disorder; neurological disorder;
KW gastrointestinal disease; infection; cytostatic; gene; ds.
XX
OS Homo sapiens.
XX
PN WO200155317-A2.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001329.
XX

PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
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PR 14-AUG-2000; 2000US-0225266P.
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PR 14-AUG-2000; 2000US-0225268P.
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PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
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PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
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PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
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PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
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PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
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PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.

PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483232/52.
XX
PT Nucleic acids encoding 973 human testicular antigen polypeptides, useful
PT for preventing, diagnosing and/or treating testicular cancer.
XX
PS Disclosure; SEQ ID NO 2030; 766pp; English.
XX
CC The present invention provides the protein and coding sequences of 973
CC human testicular antigens, and fragments of their genomic sequences. The
CC sequences can be used in the treatment of cardiovascular, urinary system,
CC reproductive system, immune, respiratory, neurological and
CC gastrointestinal disorders, infections, and particularly cancer,
CC especially testicular cancers. The present sequence is a DNA encoding a
CC protein fragment of the invention
XX
SQ Sequence 6565 BP; 1349 A; 1951 C; 1910 G; 1355 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 4; Length 6565;
Best Local Similarity 100.0%; Pred. No. 3e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
||||||||||||||||||||||||||||||||||||||||||||||
Db 5140 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 5096

RESULT 144
ABL97377/c
ID ABL97377 standard; DNA; 6565 BP.
XX
AC ABL97377;
XX
DT 21-JUN-2002 (first entry)
XX
DE Human testicular antigen encoding DNA fragment SEQ ID NO: 2029.
XX
KW Human; testicular antigen; testes; cancer; metastasis; immune disorder;
KW reproductive system disorder; urinary system disorder; gene therapy;
KW cardiovascular disorder; respiratory disorder; neurological disorder;
KW gastrointestinal disease; infection; cytostatic; gene; ds.
XX
OS Homo sapiens.
XX
PN WO200155317-A2.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001329.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
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PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.

PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
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PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483232/52.
XX
PT Nucleic acids encoding 973 human testicular antigen polypeptides, useful
PT for preventing, diagnosing and/or treating testicular cancer.
XX
PS Disclosure; SEQ ID NO 2029; 766pp; English.
XX
CC The present invention provides the protein and coding sequences of 973
CC human testicular antigens, and fragments of their genomic sequences. The
CC sequences can be used in the treatment of cardiovascular, urinary system,
CC reproductive system, immune, respiratory, neurological and
CC gastrointestinal disorders, infections, and particularly cancer,
CC especially testicular cancers. The present sequence is a DNA encoding a
CC protein fragment of the invention
XX
SQ Sequence 6565 BP; 1349 A; 1951 C; 1910 G; 1355 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 4; Length 6565;
Best Local Similarity 100.0%; Pred. No. 3e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
||||||||||||||||||||||||||||||||||||||||||||||
Db 5140 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 5096

RESULT 145
AAX23521
ID AAX23521 standard; DNA; 16595 BP.
XX
AC AAX23521;
XX
DT 17-JUN-1999 (first entry)
XX

DE Human kidney aminopeptidase P genimic DNA fragment 5.
XX
KW Aminopeptidase; human; AmP; gene therapy; treatment; AmP-deficiency;
KW prenatal diagnosis; angioedema; antihypertensive agent; atherosclerosis;
KW arterial stenosis; industrial protein feed; malabsorption syndrome;
KW proteinaceous waste degradation; additive; immunohistochemistry; ss.
XX
OS Homo sapiens.
XX
PN WO9911799-A2.
XX
PD 11-MAR-1999.
XX
PF 02-SEP-1998; 98WO-US018426.
XX
PR 02-SEP-1997; 97US-0057854P.
XX
PA (MEDI-) MEDICAL COLLEGE GEORGIA RES INST.
XX
PI Ryan JW, Sprinkle TJC, Venema RC;
XX
DR WPI; 1999-205193/17.
XX
PT Nucleic acid encoding human aminopeptidase P.
XX
PS Claim 13; Page 192-201; 201pp; English.
XX
CC This invention describes the isolation of a novel human aminopeptidase P
CC (AmP). This protein is used to produce recombinant AmP and can be used
CC for gene therapy for treating AmP-deficiency conditions. Its fragments
CC are used as primers and probes to identify patients with homozygous and
CC heterozygous AmP deficiency, including prenatal diagnosis (patients
CC defective in AmP are at risk of developing angioedema if treated with
CC angiotensin-converting enzyme inhibitors), also as antisense inhibitors
CC in cases of excessive AmP expression. The product of the invention is
CC also used to identify AmP-expressing sequences in other animals and to
CC generate transgenic animals, and comparisons of genomic sequences are
CC used to detect mutations. AmP inhibitors are potentially useful as
CC antihypertensive agents and to prevent or treat arterial (re)stenosis or
CC atherosclerosis. The structure of AmP is used to design synthetic
CC substrates, e.g. for use in AmP assays. AmP, which hydrolyzes N-terminal
CC imido bonds, can be used to degrade industrial protein feeds to free
CC amino acids, to degrade proteinaceous wastes, as additives in enzyme
CC formulations used to treat malabsorption syndrome and for studying its
CC biological role. Antibodies against AmP are used in immunohistochemical
CC methods to study AmP distribution
XX
SQ Sequence 16595 BP; 4429 A; 4145 C; 4168 G; 3853 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 2; Length 16595;
Best Local Similarity 100.0%; Pred. No. 2.9e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db 4301 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 4345

RESULT 146
AAS36670
ID AAS36670 standard; DNA; 17581 BP.
XX
AC AAS36670;
XX
DT 17-DEC-2001 (first entry)
XX
DE Human cardiovascular system antigen genomic DNA SEQ ID No 2170.
XX
KW Cardiovascular system antigen; human; mouse; rabbit; goat; horse; cat;
KW chicken; sheep; immunosuppressive; antiarthritic; vasotropic; dog;
KW antirheumatic; antiproliferative; cytostatic; cardiant; neuroprotective;
KW cerebroprotective; nootropic; antibacterial; virucide; fungicide; cancer;
KW ophthalmological; vulnerary; gene therapy; autoimmune disease; neoplasm;
KW hyperproliferative disorder; breast; liver; cardiovascular disorder; ds;
KW cerebrovascular disorder; nervous system disorder; bacterial infection;
KW fungal infection; viral infection; ocular disorder; endocrine disorder;
KW gastrointestinal disorder; renal disorder; respiratory disorder;
KW wound healing; skin aging; organ transplantation; tissue regeneration;
KW anti-infertility.
XX
OS Homo sapiens.
XX
PN WO200155321-A2.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001340.
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PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-451930/48.
XX
PT New cardiovascular system related polynucleotides and polypeptides,
PT useful for diagnosing, treating and/or preventing disorders of the
PT cardiovascular system.
XX
PS Claim 1; SEQ ID NO 2170; 674pp; English.
XX
CC Sequences AAS35741-AAS36942 represent genomic DNA molecules, which encode
CC the cardiovascular system antigen polypeptides of the invention.
CC Cardiovascular system antigens and their associated polynucleotides are
CC useful in the diagnosis, treatment and prevention of various types of
CC disorders in e.g. humans, mice, rabbits, goats, horses, cats, dogs,
CC chickens or sheep. A pathological condition can be determined by
CC detecting the presence or absence of a mutation in a cardiovascular
CC system antigen polynucleotide. The treatable disorders include autoimmune
CC diseases such as rheumatoid arthritis, hyperproliferative disorders such
CC as neoplasms of the breast or liver, cardiovascular disorders such as
CC cardiac arrest, cerebrovascular disorders such as cerebral ischaemia,
CC nervous system disorders such as Alzheimer's disease, infections caused
CC by bacteria, viruses and fungi, ocular disorders such as corneal
CC infection, endocrine disorders such as premature labour and infertility,
CC gastrointestinal disorders such as Crohn's disease, renal disorders such
CC as glomerulonephritis and respiratory disorders such as asthma and
CC pleurisy. The polypeptides can also be used to aid wound healing, to
CC prevent skin aging due to sunburn, to maintain organs before
CC transplantation, to regenerate tissues and in chemotaxis. Note: The
CC sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX

Query Match 1.4%; Score 45; DB 4; Length 17581;
Best Local Similarity 100.0%; Pred. No. 2.9e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 4841 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 4885

RESULT 147
AAK83984
ID AAK83984 standard; DNA; 17581 BP.
XX
AC AAK83984;
XX
DT 07-NOV-2001 (first entry)
XX
DE Human immune/haematopoietic antigen genomic sequence SEQ ID NO:38796.
XX
KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS Homo sapiens.
XX
PN WO200157182-A2.
XX
PD 09-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001354.
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PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 38796; 3071pp + Sequence Listing; English.

```
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting the
CC   nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 17581 BP; 4762 A; 3663 C; 4018 G; 5138 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 4;  Length 17581;
  Best Local Similarity   100.0%;  Pred. No. 2.9e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db       4841 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 4885


RESULT 148
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ID   ADE47364 standard; DNA; 17581 BP.
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AC   ADE47364;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human cardiovascular system related genomic DNA #930.
XX
KW   Human; cardiovascular system related polypeptide; cancer;
KW   proliferative disorder; foetal abnormality; developmental abnormality;
KW   haematopoietic disorder; AIDS; autoimmune disease; rheumatoid arthritis;
KW   inflammation; allergy; neurological disorder; Alzheimer's disease;
KW   Parkinson's disease; cognitive disorder; schizophrenia; asthma;
KW   skin disorder; psoriasis; sepsis; diabetes; atherosclerosis;
KW   cardiovascular disorder; angiogenic disorder; kidney disorder;
KW   gastrointestinal disorder; pregnancy-related disorder;
KW   endocrine disorder; gene; ds.
XX
OS   Homo sapiens.
XX
PN   US2003059908-A1.
XX
PD   27-MAR-2003.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
PR 17-JAN-2001; 2001US-00764869.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM, Barash SC;
XX
DR WPI; 2003-743766/70.
XX
PT New cardiovascular system related polynucleotides and polypeptides,
PT useful for preventing, treating, or ameliorating a medical condition,
PT such as cancer of cardiovascular tissues and cancer metastases.
XX
PS Claim 1; SEQ ID NO 2170; 262pp; English.
XX
CC The invention relates to human cardiovascular system related polypeptides
CC and the polynucleotides encoding them. The polypeptides, polynucleotides
CC and antibodies to the polypeptides are useful for diagnosing a
CC pathological condition or a susceptibility to a pathological condition,
CC for preventing, treating, or ameliorating a medical condition, such as
CC cancer of cardiovascular system tissues, proliferative disorders, foetal
CC and developmental abnormalities, haematopoietic disorders, diseases of
CC the immune system, AIDS, autoimmune diseases (e.g., rheumatoid
CC arthritis), inflammation, allergies, neurological disorders (e.g.,
CC Alzheimer's disease, Parkinson's disease), cognitive disorders,
CC schizophrenia, asthma, skin disorders (e.g., psoriasis), sepsis,
CC diabetes, atherosclerosis, cardiovascular disorders, angiogenic
CC disorders, kidney disorders, gastrointestinal disorders, pregnancy-
CC related disorders, endocrine disorders and infections. The nucleic acids
CC are also useful for chromosome identification, radiation hybrid mapping
CC or long-range restriction mapping. The polypeptides and polynucleotides
CC may also be used as food additives or preservatives to increase or
CC decrease storage capabilities, fat content or other nutritional
CC components. This sequence represents human cardiovascular system related
CC genomic DNA of the invention.
XX
SQ Sequence 17581 BP; 4762 A; 3663 C; 4018 G; 5138 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 10; Length 17581;
Best Local Similarity 100.0%; Pred. No. 2.9e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 149
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ID ADJ08782 standard; DNA; 17581 BP.
XX
AC ADJ08782;
XX
DT 04-NOV-2004 (first entry)
XX
DE Human cardiovascular system associated polypeptide-related DNA SeqID2170.
XX
KW autoimmune disease; rheumatoid arthritis; hyperproliferative disorder;
KW breast neoplasms; liver neoplasm; cardiovascular disorder;
KW cardiac arrest; cerebrovascular disorder; cerebral ischaemia;
KW angiogenesis; nervous system disorder; Alzheimer's disease; infection;
KW ocular disorder; corneal infection; wound healing;
KW epithelial cell proliferation; skin aging; sunburn;
KW organ transplantation; cell culture; tissue regeneration; chemotaxis;
KW food additive; preservative; cardiovascular system associated antigen;
KW nuclear factor kappaB; NFkappaB; promoter element; human; ds.
XX
OS Homo sapiens.
XX
PN US2004005575-A1.
XX
PD 08-JAN-2004.
XX
PF 26-AUG-2002; 2002US-00227577.
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PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
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PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
PR 17-JAN-2001; 2001US-00764869.
PR 07-MAR-2002; 2002US-00091504.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM, Barash SC;
XX
DR WPI; 2004-081713/08.
XX
PT New cardiovascular system-related nucleic acid molecule, useful for
PT diagnosing, preventing or treating diseases of the cardiovascular system,
PT and in chromosome mapping, drug screening or in pharmacogenomics.
XX
PS Disclosure; SEQ ID NO 2170; 262pp; English.
XX
CC The invention relates to an isolated nucleic acid molecule encoding a
CC human cardiovascular system associated polypeptide (or antigens), or its
CC fragment. Also included recombinant vectors, recombinant host cells, an
CC isolated human cardiovascular system associated polypeptide (including
CC its fragment, allelic variant, species homologue or epitope), an isolated
CC antibody that binds specifically to a human cardiovascular system
CC associated polypeptide, diagnosing a pathological condition or
CC susceptibility to a pathological condition (comprising determining the
CC presence or absence of a mutation in human cardiovascular system
CC associated nucleic acid and diagnosing a condition based on the presence
CC or absence of the mutation), identifying a binding partner to human
CC cardiovascular system associated polypeptides, the gene corresponding to
CC the human cardiovascular system associated cDNA sequence and identifying
CC an activity in a biological assay comprising expressing the human
CC cardiovascular system associated cDNA in a cell, isolating the
CC supernatant, detecting an activity in a biological assay and identifying
CC the protein in the supernatant having the activity. The human
CC cardiovascular system associated nucleic acids and polypeptides are used
CC to prevent, treat or ameliorate a medical condition (for example in

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CC   humans, mice, rabbits, goats, horses, cats, dogs, chickens or sheep), for
CC   example autoimmune diseases such as rheumatoid arthritis,
CC   hyperproliferative disorders, for example neoplasms of the breast or
CC   liver, cardiovascular disorders, for example cardiac arrest,

  Query Match             1.4%;  Score 45;  DB 13;  Length 17581;
  Best Local Similarity   100.0%;  Pred. No. 2.9e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2898 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 2942
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Db       4841 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 4885


RESULT 150
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ID   AAS36812 standard; DNA; 17946 BP.
XX
AC   AAS36812;
XX
DT   17-DEC-2001  (first entry)
XX
DE   Human cardiovascular system antigen genomic DNA SEQ ID No 2312.
XX
KW   Cardiovascular system antigen; human; mouse; rabbit; goat; horse; cat;
KW   chicken; sheep; immunosuppressive; antiarthritic; vasotropic; dog;
KW   antirheumatic; antiproliferative; cytostatic; cardiant; neuroprotective;
KW   cerebroprotective; nootropic; antibacterial; virucide; fungicide; cancer;
KW   ophthalmological; vulnerary; gene therapy; autoimmune disease; neoplasm;
KW   hyperproliferative disorder; breast; liver; cardiovascular disorder; ds;
KW   cerebrovascular disorder; nervous system disorder; bacterial infection;
KW   fungal infection; viral infection; ocular disorder; endocrine disorder;
KW   gastrointestinal disorder; renal disorder; respiratory disorder;
KW   wound healing; skin aging; organ transplantation; tissue regeneration;
KW   anti-infertility.
XX
OS   Homo sapiens.
XX
PN   WO200155321-A2.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001340.
XX
PR   31-JAN-2000; 2000US-0179065P.
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XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-451930/48.
XX
PT   New cardiovascular system related polynucleotides and polypeptides,
PT   useful for diagnosing, treating and/or preventing disorders of the
PT   cardiovascular system.
XX
PS   Claim 1; SEQ ID NO 2312; 674pp; English.
XX
CC   Sequences AAS35741-AAS36942 represent genomic DNA molecules, which encode
CC   the cardiovascular system antigen polypeptides of the invention.
CC   Cardiovascular system antigens and their associated polynucleotides are
CC   useful in the diagnosis, treatment and prevention of various types of
CC   disorders in e.g. humans, mice, rabbits, goats, horses, cats, dogs,
CC   chickens or sheep. A pathological condition can be determined by
CC   detecting the presence or absence of a mutation in a cardiovascular
CC   system antigen polynucleotide. The treatable disorders include autoimmune
CC   diseases such as rheumatoid arthritis, hyperproliferative disorders such
CC   as neoplasms of the breast or liver, cardiovascular disorders such as
CC   cardiac arrest, cerebrovascular disorders such as cerebral ischaemia,
CC   nervous system disorders such as Alzheimer's disease, infections caused
CC   by bacteria, viruses and fungi, ocular disorders such as corneal
CC   infection, endocrine disorders such as premature labour and infertility,
CC   gastrointestinal disorders such as Crohn's disease, renal disorders such
CC   as glomerulonephritis and respiratory disorders such as asthma and
CC   pleurisy. The polypeptides can also be used to aid wound healing, to
CC   prevent skin aging due to sunburn, to maintain organs before
CC   transplantation, to regenerate tissues and in chemotaxis. Note: The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX

  Query Match             1.4%;  Score 45;  DB 4;  Length 17946;
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Qy       2898 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 2942
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Db       7806 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 7850


RESULT 151
ABA15608
ID   ABA15608 standard; DNA; 17946 BP.
XX
AC   ABA15608;
XX
DT   23-JAN-2002  (first entry)
XX
DE   Human nervous system related polynucleotide SEQ ID NO 7939.
XX
KW   Human; nootropic; neuroprotective; cytostatic; dermatological; virucide;
KW   immunosuppressive; antiinflammatory; anti-HIV; antibacterial; vulnerary;
KW   antiparkinsonian; antisickling; antianaemic; antiarthritic; cancer;
KW   antirheumatic; hepatotropic; cerebroprotective; antiinflammatory;
KW   antiallergic; antidiabetic; antiulcer; anticonvulsant; antifungal;
KW   antiparasitic; cardiant; immune disorder; cardiovascular disorder;
KW   neurological disease; infection; nephrotropic; gene therapy; vaccine; ds.
XX
OS   Homo sapiens.
XX
PN   WO200159063-A2.
XX
PD   16-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001334.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
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PR   02-MAR-2000; 2000US-0186350P.
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PR   14-AUG-2000; 2000US-0225758P.
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PR   22-AUG-2000; 2000US-0226681P.
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PR   22-AUG-2000; 2000US-0227182P.
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PR   01-SEP-2000; 2000US-0229345P.
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PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-541565/60.
XX
PT Nucleic acids encoding 3224 human nervous system antigen polypeptides,
PT useful for preventing, diagnosing and/or treating nervous system cancers
PT and metastases.
XX
PS Disclosure; SEQ ID NO 7939; 1701pp + Sequence Listing; English.
XX
CC The invention relates to novel genes (ABA11004-ABA21534) and proteins
CC (ABB14678-ABB18001) useful for preventing, treating or ameliorating
CC medical conditions e.g. by protein or gene therapy. The genes are
CC isolated from a range of human tissues disclosed in the specification.
CC The nucleic acids, proteins, antibodies and (ant)agonists are useful in
CC the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and
CC ovarian cancer and other cancers of the adrenal gland, bone, bone marrow,
CC breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune
CC disorders e.g. Addison's disease, allergies, autoimmune haemolytic
CC anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease,
CC multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c)
CC cardiovascular disorders such as myocardial ischaemias; (d) wound healing
CC ; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f)
CC infectious diseases such as viral, bacterial, fungal and parasitic
CC infections. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 17946 BP; 4718 A; 3994 C; 4320 G; 4914 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 5; Length 17946;
Best Local Similarity 100.0%; Pred. No. 2.9e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2898 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 2942
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Db 7806 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 7850

RESULT 152
ADE47506
ID ADE47506 standard; DNA; 17946 BP.
XX
AC ADE47506;
XX
DT 29-JAN-2004 (first entry)
XX

DE Human cardiovascular system related genomic DNA #1072.
XX
KW Human; cardiovascular system related polypeptide; cancer;
KW proliferative disorder; foetal abnormality; developmental abnormality;
KW haematopoietic disorder; AIDS; autoimmune disease; rheumatoid arthritis;
KW inflammation; allergy; neurological disorder; Alzheimer's disease;
KW Parkinson's disease; cognitive disorder; schizophrenia; asthma;
KW skin disorder; psoriasis; sepsis; diabetes; atherosclerosis;
KW cardiovascular disorder; angiogenic disorder; kidney disorder;
KW gastrointestinal disorder; pregnancy-related disorder;
KW endocrine disorder; gene; ds.
XX
OS Homo sapiens.
XX
PN US2003059908-A1.
XX
PD 27-MAR-2003.
XX
PF 07-MAR-2002; 2002US-00091504.
XX
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PR 27-SEP-2000; 2000US-0235834P.
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PR 29-SEP-2000; 2000US-0236327P.
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PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
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PR 13-OCT-2000; 2000US-0239935P.
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PR 20-OCT-2000; 2000US-0241221P.
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PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
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PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
PR 17-JAN-2001; 2001US-00764869.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM, Barash SC;
XX
DR WPI; 2003-743766/70.
XX
PT New cardiovascular system related polynucleotides and polypeptides,
PT useful for preventing, treating, or ameliorating a medical condition,
PT such as cancer of cardiovascular tissues and cancer metastases.
XX
PS Claim 1; SEQ ID NO 2312; 262pp; English.
XX
CC The invention relates to human cardiovascular system related polypeptides
CC and the polynucleotides encoding them. The polypeptides, polynucleotides
CC and antibodies to the polypeptides are useful for diagnosing a
CC pathological condition or a susceptibility to a pathological condition,
CC for preventing, treating, or ameliorating a medical condition, such as
CC cancer of cardiovascular system tissues, proliferative disorders, foetal
CC and developmental abnormalities, haematopoietic disorders, diseases of
CC the immune system, AIDS, autoimmune diseases (e.g., rheumatoid
CC arthritis), inflammation, allergies, neurological disorders (e.g.,
CC Alzheimer's disease, Parkinson's disease), cognitive disorders,
CC schizophrenia, asthma, skin disorders (e.g., psoriasis), sepsis,
CC diabetes, atherosclerosis, cardiovascular disorders, angiogenic
CC disorders, kidney disorders, gastrointestinal disorders, pregnancy-
CC related disorders, endocrine disorders and infections. The nucleic acids
CC are also useful for chromosome identification, radiation hybrid mapping
CC or long-range restriction mapping. The polypeptides and polynucleotides
CC may also be used as food additives or preservatives to increase or
CC decrease storage capabilities, fat content or other nutritional
CC components. This sequence represents human cardiovascular system related
CC genomic DNA of the invention.
XX
SQ Sequence 17946 BP; 4718 A; 3994 C; 4320 G; 4914 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 10; Length 17946;
Best Local Similarity 100.0%; Pred. No. 2.9e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2898 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 2942
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Db 7806 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 7850

RESULT 153
ADJ08924
ID ADJ08924 standard; DNA; 17946 BP.
XX
AC ADJ08924;
XX
DT 04-NOV-2004 (first entry)
XX
DE Human cardiovascular system associated polypeptide-related DNA SeqID2312.
XX
KW autoimmune disease; rheumatoid arthritis; hyperproliferative disorder;
KW breast neoplasms; liver neoplasm; cardiovascular disorder;
KW cardiac arrest; cerebrovascular disorder; cerebral ischaemia;
KW angiogenesis; nervous system disorder; Alzheimer's disease; infection;
KW ocular disorder; corneal infection; wound healing;
KW epithelial cell proliferation; skin aging; sunburn;
KW organ transplantation; cell culture; tissue regeneration; chemotaxis;
KW food additive; preservative; cardiovascular system associated antigen;
KW nuclear factor kappaB; NFkappaB; promoter element; human; ds.
XX
OS Homo sapiens.
XX
PN US2004005575-A1.
XX
PD 08-JAN-2004.
XX
PF 26-AUG-2002; 2002US-00227577.
XX
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PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.

PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
PR 17-JAN-2001; 2001US-00764869.
PR 07-MAR-2002; 2002US-00091504.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM, Barash SC;
XX
DR WPI; 2004-081713/08.
XX
PT New cardiovascular system-related nucleic acid molecule, useful for
PT diagnosing, preventing or treating diseases of the cardiovascular system,
PT and in chromosome mapping, drug screening or in pharmacogenomics.
XX
PS Disclosure; SEQ ID NO 2312; 262pp; English.
XX
CC The invention relates to an isolated nucleic acid molecule encoding a
CC human cardiovascular system associated polypeptide (or antigens), or its
CC fragment. Also included recombinant vectors, recombinant host cells, an
CC isolated human cardiovascular system associated polypeptide (including
CC its fragment, allelic variant, species homologue or epitope), an isolated
CC antibody that binds specifically to a human cardiovascular system
CC associated polypeptide, diagnosing a pathological condition or
CC susceptibility to a pathological condition (comprising determining the
CC presence or absence of a mutation in human cardiovascular system
CC associated nucleic acid and diagnosing a condition based on the presence
CC or absence of the mutation), identifying a binding partner to human
CC cardiovascular system associated polypeptides, the gene corresponding to
CC the human cardiovascular system associated cDNA sequence and identifying
CC an activity in a biological assay comprising expressing the human
CC cardiovascular system associated cDNA in a cell, isolating the
CC supernatant, detecting an activity in a biological assay and identifying
CC the protein in the supernatant having the activity. The human
CC cardiovascular system associated nucleic acids and polypeptides are used
CC to prevent, treat or ameliorate a medical condition (for example in
CC humans, mice, rabbits, goats, horses, cats, dogs, chickens or sheep), for
CC example autoimmune diseases such as rheumatoid arthritis,
CC hyperproliferative disorders, for example neoplasms of the breast or
CC liver, cardiovascular disorders, for example cardiac arrest,

Query Match 1.4%; Score 45; DB 13; Length 17946;
Best Local Similarity 100.0%; Pred. No. 2.9e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2898 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 2942
||||||||||||||||||||||||||||||||||||||||||||
Db 7806 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 7850

RESULT 154
ACN45138
ID ACN45138 standard; DNA; 23694 BP.
XX
AC ACN45138;
XX
DT 18-NOV-2004 (first entry)
XX
DE Human genomic sequence hCG17175.
XX
KW Cytostatic; carcinoma; lymphoma; cancer; human; gene; ss.
XX
OS Homo sapiens.
XX
PN WO2003073826-A2.
XX
PD 12-SEP-2003.
XX
PF 28-FEB-2003; 2003WO-US006235.
XX
PR 01-MAR-2002; 2002US-00087192.
XX
PA (SAGR-) SAGRES DISCOVERY.
XX

PI Morris DW;
XX
DR WPI; 2003-328604/31.
XX
PT Recombinant nucleic acid useful for diagnosis and treatment of carcinoma
PT comprises a nucleotide sequence.
XX
PS Claim 1; SEQ ID NO 1936; 0pp; English.
XX
CC The present invention relates to novel DNA and protein sequences which
CC are associated with carcinomas. The sequences are useful for: (i) for
CC screening drug candidates; (ii) for screening of bioactive agent capable
CC of binding to Carcinoma Associated Protein (CAP); (iii) for screening of
CC a bioactive agent capable of modulating the activity of CAP; (iv) for
CC evaluating the effect of a candidate carcinoma drug; (v) for diagnosing
CC carcinoma; (vi) for inhibiting the activity of CAP; (vii) for treating
CC carcinoma; (viii) for neutralizing the effect of CAP; (ix) as a biochip;
CC (x) for diagnosing carcinoma or a propensity to carcinoma; and (xi) for
CC determining Carcinoma Associated (CA) gene copy number. In addition, the
CC CA genes are useful as DNA vaccines and the CAP are useful as markers of
CC carcinoma including lymphoma. The present sequence is one such CA coding
CC sequence. Note: This patent is an equivalent to basic patent
CC US2002182586A1, for which no sequence data was published
XX
SQ Sequence 23694 BP; 5742 A; 6329 C; 5736 G; 5781 T; 0 U; 106 Other;

Query Match 1.4%; Score 45; DB 11; Length 23694;
Best Local Similarity 100.0%; Pred. No. 2.9e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3077 TGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 3121
||||||||||||||||||||||||||||||||||||||||||||||
Db 18194 TGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 18238

RESULT 155
ACN44954
ID ACN44954 standard; DNA; 31116 BP.
XX
AC ACN44954;
XX
DT 18-NOV-2004 (first entry)
XX
DE Human genomic sequence hCG38622.
XX
KW Cytostatic; carcinoma; lymphoma; cancer; human; gene; ss.
XX
OS Homo sapiens.
XX
PN WO2003073826-A2.
XX
PD 12-SEP-2003.
XX
PF 28-FEB-2003; 2003WO-US006235.
XX
PR 01-MAR-2002; 2002US-00087192.
XX
PA (SAGR-) SAGRES DISCOVERY.
XX
PI Morris DW;
XX
DR WPI; 2003-328604/31.
XX
PT Recombinant nucleic acid useful for diagnosis and treatment of carcinoma
PT comprises a nucleotide sequence.
XX
PS Claim 1; SEQ ID NO 1660; 0pp; English.
XX
CC The present invention relates to novel DNA and protein sequences which
CC are associated with carcinomas. The sequences are useful for: (i) for
CC screening drug candidates; (ii) for screening of bioactive agent capable
CC of binding to Carcinoma Associated Protein (CAP); (iii) for screening of
CC a bioactive agent capable of modulating the activity of CAP; (iv) for
CC evaluating the effect of a candidate carcinoma drug; (v) for diagnosing
CC carcinoma; (vi) for inhibiting the activity of CAP; (vii) for treating
CC carcinoma; (viii) for neutralizing the effect of CAP; (ix) as a biochip;
CC (x) for diagnosing carcinoma or a propensity to carcinoma; and (xi) for
CC determining Carcinoma Associated (CA) gene copy number. In addition, the
CC CA genes are useful as DNA vaccines and the CAP are useful as markers of
CC carcinoma including lymphoma. The present sequence is one such CA coding
CC sequence. Note: This patent is an equivalent to basic patent
CC US2002182586A1, for which no sequence data was published
XX
SQ Sequence 31116 BP; 7214 A; 8217 C; 7722 G; 7963 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 11; Length 31116;
Best Local Similarity 100.0%; Pred. No. 2.8e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
|||||||||||||||||||||||||||||||||||||||||||||
Db 6981 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 7025

RESULT 156
ADZ13255
ID ADZ13255 standard; DNA; 31279 BP.
XX
AC ADZ13255;
XX
DT 16-JUN-2005 (first entry)
XX
DE Human cancer-associated genomic DNA #63.
XX
KW Diagnosis; DNA microarray; microarray; biochip; cancer; neoplasm;
KW cytostatic; gene; ds.
XX
OS Homo sapiens.
XX
PN WO2005031001-A2.
XX
PD 07-APR-2005.
XX
PF 23-SEP-2004; 2004WO-US031617.
XX
PR 23-SEP-2003; 2003US-00669920.
XX
PA (CHIR) CHIRON CORP.
XX
PI Morris DW, Malandro MS;
XX
DR WPI; 2005-273395/28.
XX
PT Nucleic acid array useful for detecting cancer associated nucleic acid,
PT comprises two or more nucleic acid probes.
XX
PS Disclosure; SEQ ID NO 775; 198pp; English.
XX
CC The invention relates to a nucleic acid array for detecting a cancer
CC associated (CA) nucleic acid, comprising two or more nucleic acid probes.
CC The invention also relates to a peptide array comprising two or more
CC isolated polypeptides encoded by a CA nucleic acid sequence, a compound
CC that binds to a polypeptide, an isolated antibody or its fragment which
CC binds to a polypeptide, which is prepared by immunizing a host animal
CC with a composition comprising the polypeptide or its antigen binding
CC fragment and collecting cells from the host expressing antibodies against
CC the antigen or its antigen binding fragment, a composition comprising the
CC antibody and a carrier, a method of screening for anticancer activity, a
CC method of detecting a CA nucleic acid, a method of diagnosing cancer, a
CC method of treating cancer and a method of inhibiting expression of a CA
CC nucleic acid in a cell. The CA nucleic acids are useful for detecting CA
CC nucleic acids. The antibody is useful for detecting the presence or
CC absence of cancer cells in an individual which involves contacting cells
CC from the individual with the antibody and detecting a complex of a CA
CC protein from the cancer cells and the antibody, where the detection of
CC the complex correlates with the presence of cancer cells in the

```
CC   individual. The composition is useful for inhibiting growth of cancer
CC   cells in an individual or for delivering a therapeutic agent to cancer
CC   cells in an individual. The invention is also useful for diagnosing
CC   cancer, for treating cancer and for inhibiting expression of a CA gene in
CC   a cell. This sequence represents human cancer-associated genomic DNA of
CC   the invention.
XX
SQ   Sequence 31279 BP; 7246 A; 8268 C; 7755 G; 8010 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 14;  Length 31279;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             |||||||||||||||||||||||||||||||||||||||||||||
Db       7137 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 7181


RESULT 157
ACN45014
ID   ACN45014 standard; DNA; 32706 BP.
XX
AC   ACN45014;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Human genomic sequence hCG14907.
XX
KW   Cytostatic; carcinoma; lymphoma; cancer; human; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003073826-A2.
XX
PD   12-SEP-2003.
XX
PF   28-FEB-2003; 2003WO-US006235.
XX
PR   01-MAR-2002; 2002US-00087192.
XX
PA   (SAGR-) SAGRES DISCOVERY.
XX
PI   Morris DW;
XX
DR   WPI; 2003-328604/31.
XX
PT   Recombinant nucleic acid useful for diagnosis and treatment of carcinoma
PT   comprises a nucleotide sequence.
XX
PS   Claim 1; SEQ ID NO 1750; 0pp; English.
XX
CC   The present invention relates to novel DNA and protein sequences which
CC   are associated with carcinomas. The sequences are useful for: (i) for
CC   screening drug candidates; (ii) for screening of bioactive agent capable
CC   of binding to Carcinoma Associated Protein (CAP); (iii) for screening of
CC   a bioactive agent capable of modulating the activity of CAP; (iv) for
CC   evaluating the effect of a candidate carcinoma drug; (v) for diagnosing
CC   carcinoma; (vi) for inhibiting the activity of CAP; (vii) for treating
CC   carcinoma; (viii) for neutralizing the effect of CAP; (ix) as a biochip;
CC   (x) for diagnosing carcinoma or a propensity to carcinoma; and (xi) for
CC   determining Carcinoma Associated (CA) gene copy number. In addition, the
CC   CA genes are useful as DNA vaccines and the CAP are useful as markers of
CC   carcinoma including lymphoma. The present sequence is one such CA coding
CC   sequence. Note: This patent is an equivalent to basic patent
CC   US2002182586A1, for which no sequence data was published
XX
SQ   Sequence 32706 BP; 8225 A; 7861 C; 8277 G; 8343 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 11;  Length 32706;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2898 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 2942
             |||||||||||||||||||||||||||||||||||||||||||||
Db      15591 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 15635


RESULT 158
ADL82795/c
ID   ADL82795 standard; DNA; 36534 BP.
XX
AC   ADL82795;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human semaphorin3B, SEMA3B, DNA.
XX
KW   cancer cell proliferation; semaphorin3B; SEMA3B; cancer; tumour growth;
KW   apoptosis; human; ds; gene.
XX
OS   Homo sapiens.
XX
PN   US2003166557-A1.
XX
PD   04-SEP-2003.
XX
PF   31-OCT-2002; 2002US-00285351.
XX
PR   31-OCT-2001; 2001US-0335783P.
XX
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Minna J,  Tomizawa Y,  Sekido Y,  Lerman M;
XX
DR   WPI; 2003-898098/82.
DR   P-PSDB; ADL82793.
XX
PT   Inhibiting the proliferation of a cancer cell (e.g. breast cancer cell,
PT   lung cancer cell or prostate cancer cell) comprises contacting the cell
PT   with a semaphorin3B polypeptide that suppresses tumor growth.
XX
PS   Disclosure; SEQ ID NO 3; 75pp; English.
XX
CC   The invention relates to a method of inhibiting the proliferation of a
CC   cancer cell comprises contacting the cell with a semaphorin3B (SEMA3B)
CC   polypeptide. The composition and methods are useful in diagnosing or
CC   treating cancer. The SEMA3B polypeptide inhibits tumour growth and
CC   induces apoptosis in cancer cells. The present sequence represents DNA
CC   encoding human semaphorin3B, SEMA3B.
XX
SQ   Sequence 36534 BP; 7493 A; 10597 C; 10438 G; 8006 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 11;  Length 36534;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             |||||||||||||||||||||||||||||||||||||||||||||
Db       7478 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 7434


RESULT 159
AEB32373/c
ID   AEB32373 standard; DNA; 38678 BP.
XX
AC   AEB32373;
XX
DT   08-SEP-2005  (first entry)
XX
DE   Human genomic DNA #14.
XX
KW   SNP detection; diagnosis; non-insulin dependent diabetes; obesity;
KW   antidiabetic; anorectic; endocrine disease; gastrointestinal disease;
KW   metabolic disorder; nutritional disorder; gene; ds.
XX
OS   Homo sapiens.
```

XX
PN US2005147987-A1.
XX
PD 07-JUL-2005.
XX
PF 19-JUL-2004; 2004US-00893315.
XX
PR 08-SEP-2000; 2000US-0231397P.
PR 10-SEP-2001; 2001US-00948947.
XX
PA (APPL-) APPLERA CORP NY.
XX
PI Venter JC, Zhang JN, Liu X, Rowe W, Cravchik A, Kalush F;
PI Naik A, Subramanian G, Woodage T;
XX
DR WPI; 2005-511776/52.
XX
PT New detection reagent capable of detecting 1, 100, 500, 1000 or 5000 or
PT more single nucleic acid polymorphisms, useful in identifying an
PT individual having or at risk of developing type II diabetes or obesity.
XX
PS Disclosure; SEQ ID NO 136; 31pp; English.
XX
CC The invention relates to a detection reagent capable of detecting one or
CC more single nucleic acid polymorphisms. The invention also relates to
CC determining whether a trait is linked to one of the human chromosomes or
CC its sub-region, a computer readable medium having stored in it the SNP
CC relational information given in the specification, an isolated nucleic
CC acid molecule for detecting at least one SNP given in the specification
CC comprising at least about 12 contiguous nucleotides, genotyping at least
CC one SNP position given in the specification in a sample, identifying an
CC individual having or at risk of developing a disorder and a kit
CC comprising at least one container containing the detection reagent.
CC Determining whether a trait is linked to one of the human chromosomes or
CC its sub-region comprises determining whether the trait is linked to one
CC or more SNPs using the detection reagents. Genotyping at least one SNP
CC position given in the specification in a sample comprises contacting the
CC sample with a detection reagent that differentiates between alternative
CC alleles at at least one SNP position given in the specification, and
CC determining which allele is present at the at least one SNP position.
CC Identifying an individual having or at risk of developing a disorder
CC comprises genotyping at least one SNP given in the specification in a
CC nucleic acid sample from the individual. The disorder is type II diabetes
CC (non-insulin dependent diabetes) or obesity. The detection reagent is
CC useful in identifying an individual having or at risk of developing a
CC disorder, particularly type II diabetes or obesity. This sequence
CC represents human genomic DNA used in the scope of the invention. Note:
CC The sequence data for this patent did not form part of the printed
CC specification but was obtained in electronic format from USPTO at
CC seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 38678 BP; 9340 A; 9040 C; 9074 G; 10537 T; 0 U; 687 Other;

Query Match 1.4%; Score 45; DB 14; Length 38678;
Best Local Similarity 100.0%; Pred. No. 2.8e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACA 2939
||||||||||||||||||||||||||||||||||||||||||||
Db 23579 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACA 23535

RESULT 160
AEB32391/c
ID AEB32391 standard; DNA; 38684 BP.
XX
AC AEB32391;
XX
DT 08-SEP-2005 (first entry)
XX
DE Human genomic DNA #32.
XX
KW SNP detection; diagnosis; non-insulin dependent diabetes; obesity;
KW antidiabetic; anorectic; endocrine disease; gastrointestinal disease;
KW metabolic disorder; nutritional disorder; gene; ds.
XX
OS Homo sapiens.
XX
PN US2005147987-A1.
XX
PD 07-JUL-2005.
XX
PF 19-JUL-2004; 2004US-00893315.
XX
PR 08-SEP-2000; 2000US-0231397P.
PR 10-SEP-2001; 2001US-00948947.
XX
PA (APPL-) APPLERA CORP NY.
XX
PI Venter JC, Zhang JN, Liu X, Rowe W, Cravchik A, Kalush F;
PI Naik A, Subramanian G, Woodage T;
XX
DR WPI; 2005-511776/52.
XX
PT New detection reagent capable of detecting 1, 100, 500, 1000 or 5000 or
PT more single nucleic acid polymorphisms, useful in identifying an
PT individual having or at risk of developing type II diabetes or obesity.
XX
PS Disclosure; SEQ ID NO 154; 31pp; English.
XX
CC The invention relates to a detection reagent capable of detecting one or
CC more single nucleic acid polymorphisms. The invention also relates to
CC determining whether a trait is linked to one of the human chromosomes or
CC its sub-region, a computer readable medium having stored in it the SNP
CC relational information given in the specification, an isolated nucleic
CC acid molecule for detecting at least one SNP given in the specification
CC comprising at least about 12 contiguous nucleotides, genotyping at least
CC one SNP position given in the specification in a sample, identifying an
CC individual having or at risk of developing a disorder and a kit
CC comprising at least one container containing the detection reagent.
CC Determining whether a trait is linked to one of the human chromosomes or
CC its sub-region comprises determining whether the trait is linked to one
CC or more SNPs using the detection reagents. Genotyping at least one SNP
CC position given in the specification in a sample comprises contacting the
CC sample with a detection reagent that differentiates between alternative
CC alleles at at least one SNP position given in the specification, and
CC determining which allele is present at the at least one SNP position.
CC Identifying an individual having or at risk of developing a disorder
CC comprises genotyping at least one SNP given in the specification in a
CC nucleic acid sample from the individual. The disorder is type II diabetes
CC (non-insulin dependent diabetes) or obesity. The detection reagent is
CC useful in identifying an individual having or at risk of developing a
CC disorder, particularly type II diabetes or obesity. This sequence
CC represents human genomic DNA used in the scope of the invention. Note:
CC The sequence data for this patent did not form part of the printed
CC specification but was obtained in electronic format from USPTO at
CC seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 38684 BP; 9340 A; 9042 C; 9075 G; 10540 T; 0 U; 687 Other;

Query Match 1.4%; Score 45; DB 14; Length 38684;
Best Local Similarity 100.0%; Pred. No. 2.8e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2895 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACA 2939
||||||||||||||||||||||||||||||||||||||||||||
Db 23584 GGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACA 23540

RESULT 161
ADN31618
ID ADN31618 standard; DNA; 39566 BP.
XX
AC ADN31618;
XX
DT 12-AUG-2004 (first entry)

```
XX
DE   Human squalene synthase genomic DNA.
XX
KW   Human; ds; antisense; squalene synthase;
KW   farnesyl diphosphate farnesyl transferase 1; cholesterol;
KW   atherosclerosis; coronary heart disease; hypercholesterolaemia.
XX
OS   Homo sapiens.
XX
PN   US2004102405-A1.
XX
PD   27-MAY-2004.
XX
PF   23-NOV-2002; 2002US-00304125.
XX
PR   23-NOV-2002; 2002US-00304125.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Freier SM,  Bennett CF,  Dean NM,  Dobie KW;
XX
DR   WPI; 2004-399735/37.
XX
PT   New oligonucleotide targeted to a nucleic acid molecule encoding squalene
PT   synthase, useful in diagnosing and treating atherosclerosis.
XX
PS   Example 15; SEQ ID NO 11; 67pp; English.
XX
CC   The invention relates to a new compound 8-80 nucleobases in length (an
CC   antisense oligonucleotide) targeted to a nucleic acid molecule encoding
CC   squalene synthase (also known as farnesyl diphosphate farnesyl
CC   transferase 1), where the compound specifically hybridises with the
CC   nucleic acid molecule encoding human squalene synthase appearing as
CC   ADN31611 and inhibits the expression of squalene synthase. Also included
CC   are inhibiting the expression of squalene synthase in cells or tissues,
CC   screening for a modulator of squalene synthase, a diagnostic method for
CC   identifying a disease state, a kit or assay device comprising the
CC   compound and treating an animal having a disease or condition associated
CC   with squalene synthase. The compound and methods are useful in diagnosing
CC   and treating disorders related to cholesterol biosynthesis e.g.
CC   atherosclerosis, coronary heart disease and hypercholesterolaemia . The
CC   present sequence is a squalene synthase genomic DNA sequence, a target
CC   for the antisense oligonucleotides.
XX
SQ   Sequence 39566 BP; 9928 A; 8277 C; 9254 G; 12107 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 12;  Length 39566;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2898 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 2942
             |||||||||||||||||||||||||||||||||||||||||||||
Db      25338 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 25382


RESULT 162
ABX14652
ID   ABX14652 standard; DNA; 40090 BP.
XX
AC   ABX14652;
XX
DT   05-MAR-2003  (first entry)
XX
DE   Human gene encoding squalene synthase.
XX
KW   Human; ds; gene; squalene synthase; cholesterol-related disease;
KW   cardiovascular disease; chromosome 8.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   variation       replace(825,A)
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FT   CDS             2058. .37739
FT                   /*tag=  a
FT                   /product= "Squalene synthase"
FT   exon            2058. .2156
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FT                   /number= 1
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FT   variation       replace(5110,T)
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FT   variation       replace(6911,A)
FT                   /*tag=  w
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(7212,G)
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FT   variation       replace(7355,T)
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FT   exon            7997. .8094
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FT                   /number= 2
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FT                   /*tag=  ad
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FT   intron          8095. .8869
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FT                   /number= 2
FT   variation       replace(8145,C)
FT                   /*tag=  ac
FT                   /standard_name= "Single nucleotide polymorphism"
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(8462,G)
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FT   intron          9054. .25147
FT                   /*tag=  g
FT                   /number= 3
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FT                   /*tag= ah
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FT   variation       replace(20204,G)
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(20362,A)
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(21166,A)
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT                   /number= 4
FT   intron          25340. .29365
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FT                   /number= 4
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(26078,A)
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(26625,G)
FT                   /*tag= au
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(27151,C)
FT                   /*tag= av
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(28032,A)
FT                   /*tag= aw
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FT   intron          29543. .30639
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FT                   /number= 5
FT   variation       replace(29572,T)
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT                   /standard_name= "Single nucleotide polymorphism"
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  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2898 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 2942
              |||||||||||||||||||||||||||||||||||||||||||||
Db      25713 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 25757


RESULT 163
ADN96863
ID   ADN96863 standard; DNA; 40090 BP.
XX
AC   ADN96863;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Novel human enzyme genomic DNA.
XX
KW   disease diagnosis; gene eapression associated disorder; gene expression;
KW   enzyme peptide; human; gene; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   variation       replace(825,A)
FT                   /*tag= a
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FT   CDS             2058. .37739
FT                   /*tag= c
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FT   exon            2058. .2156
FT                   /*tag= b
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FT                   /number= 1
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FT   variation       replace(4430,C)
FT                   /*tag= f
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(4791,T)
FT                   /*tag= g
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(4886,C)
FT                   /*tag= h
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FT                   /*tag= i
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FT                   /*tag= j
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(5110,T)
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(6911,A)
FT                   /*tag= l
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(7212,G)
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(7355,T)
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FT   variation       replace(7398,C)
FT                   /*tag= o
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(7653,C)
FT                   /*tag= p
FT                   /standard_name= "Single nucleotide polymorphism"
FT   exon            7997. .8094
FT                   /*tag= q
FT                   /number= 2
FT   variation       replace(8031,G)
FT                   /*tag= r
FT                   /standard_name= "Single nucleotide polymorphism"
FT   intron          8095. .8869
FT                   /*tag= s
FT                   /number= 2
FT   variation       replace(8145,C)
FT                   /*tag= t
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(8310,A)
FT                   /*tag= u
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(8462,G)
FT                   /*tag= v
FT                   /standard_name= "Single nucleotide polymorphism"
FT   exon            8870. .9053
FT                   /*tag= w
FT                   /number= 3
FT   variation       replace(8873,T)
FT                   /*tag= x
FT                   /standard_name= "Single nucleotide polymorphism"
FT   intron          9054. .25147
FT                   /*tag= y
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT                   /*tag= aa
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(10460,C)
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT                   /*tag= ae
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(21477,A)
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FT                   /*tag= aj
FT                   /number= 4
FT   intron          25340. .29365
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FT   variation       replace(25686,A)
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FT   variation       replace(26625,G)
FT                   /*tag= ao
FT                   /standard_name= "Single nucleotide polymorphism"
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT   variation       replace(28772,A)
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FT   exon            29366. .29542
FT                   /*tag= as
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FT   intron          29543. .30639
FT                   /*tag= at
FT                   /number= 5
FT   variation       replace(29572,T)
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(29761,T)
FT                   /*tag= av
FT                   /standard_name= "Single nucleotide polymorphism"
FT   exon            30640. .30792
FT                   /*tag= aw
FT                   /number= 6
FT   variation       replace(30732,C)
FT                   /*tag= ax
FT                   /standard_name= "Single nucleotide polymorphism"
FT   intron          30793. .37517
FT                   /*tag= ay
FT                   /number= 6
FT   variation       replace(30841,G)
FT                   /*tag= az
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FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(31376,A)
FT                   /*tag= ba
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(32032,A)
FT                   /*tag= bb
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(32525,G)
FT                   /*tag= bc
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(34179,T)
FT                   /*tag= bd
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(34249,T)
FT                   /*tag= be
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(34451,C)
FT                   /*tag= bf
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(34532,C)
FT                   /*tag= bg
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(36541,C)
FT                   /*tag= bh
FT                   /standard_name= "Single nucleotide polymorphism"
FT   variation       replace(36607,G)
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  Query Match             1.4%;  Score 45;  DB 12;  Length 40090;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2898 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 2942
             |||||||||||||||||||||||||||||||||||||||||||||
Db      25713 GGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAG 25757


RESULT 164
ADZ13149/c
ID   ADZ13149 standard; DNA; 57105 BP.
XX
AC   ADZ13149;
XX
DT   16-JUN-2005  (first entry)
XX
DE   Human cancer-associated genomic DNA #56.
XX
KW   Diagnosis; DNA microarray; microarray; biochip; cancer; neoplasm;
KW   cytostatic; gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO2005031001-A2.
XX
PD   07-APR-2005.
XX
PF   23-SEP-2004; 2004WO-US031617.
XX
PR   23-SEP-2003; 2003US-00669920.
XX
PA   (CHIR ) CHIRON CORP.
XX
PI   Morris DW,  Malandro MS;
XX
DR   WPI; 2005-273395/28.
XX
PT   Nucleic acid array useful for detecting cancer associated nucleic acid,
PT   comprises two or more nucleic acid probes.
XX
PS   Disclosure; SEQ ID NO 669; 198pp; English.
XX
CC   The invention relates to a nucleic acid array for detecting a cancer
CC   associated (CA) nucleic acid, comprising two or more nucleic acid probes.
CC   The invention also relates to a peptide array comprising two or more
CC   isolated polypeptides encoded by a CA nucleic acid sequence, a compound
CC   that binds to a polypeptide, an isolated antibody or its fragment which
CC   binds to a polypeptide, which is prepared by immunizing a host animal
CC   with a composition comprising the polypeptide or its antigen binding
CC   fragment and collecting cells from the host expressing antibodies against
CC   the antigen or its antigen binding fragment, a composition comprising the
CC   antibody and a carrier, a method of screening for anticancer activity, a
CC   method of detecting a CA nucleic acid, a method of diagnosing cancer, a
CC   method of treating cancer and a method of inhibiting expression of a CA
CC   nucleic acid in a cell. The CA nucleic acids are useful for detecting CA
CC   nucleic acids. The antibody is useful for detecting the presence or
CC   absence of cancer cells in an individual which involves contacting cells
CC   from the individual with the antibody and detecting a complex of a CA
CC   protein from the cancer cells and the antibody, where the detection of
CC   the complex correlates with the presence of cancer cells in the
CC   individual. The composition is useful for inhibiting growth of cancer
CC   cells in an individual or for delivering a therapeutic agent to cancer
CC   cells in an individual. The invention is also useful for diagnosing
CC   cancer, for treating cancer and for inhibiting expression of a CA gene in
CC   a cell. This sequence represents human cancer-associated genomic DNA of
CC   the invention.
XX
SQ   Sequence 57105 BP; 15389 A; 12942 C; 12984 G; 15770 T; 0 U; 20 Other;

  Query Match             1.4%;  Score 45;  DB 14;  Length 57105;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             |||||||||||||||||||||||||||||||||||||||||||||
Db      39001 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 38957


RESULT 165
ABK83563
ID   ABK83563 standard; cDNA; 57248 BP.
XX
AC   ABK83563;
XX
DT   14-AUG-2002  (first entry)
XX
DE   Human cDNA differentially expressed in granulocytic cells #134.
XX
KW   Human; ss; granulocytic cell; DNA chip; bacterial infection;
KW   viral infection; parasitic infection; protozoal infection;
KW   fungal infection; sterile inflammatory disease; psoriasis;
KW   rheumatoid arthritis; glomerulonephritis; asthma; thrombosis;
KW   cardiac reperfusion injury; renal reperfusion injury; ARDS;
KW   adult respiratory distress syndrome; inflammatory bowel disease;
KW   Crohn's disease; ulcerative colitis; periodontal disease;
KW   granulocyte activation; chronic inflammation; allergy.
XX
OS   Homo sapiens.
XX
PN   WO200228999-A2.
XX
PD   11-APR-2002.
XX
PF   03-OCT-2001; 2001WO-US030821.
XX
PR   03-OCT-2000; 2000US-0237189P.
XX
PA   (GENE-) GENE LOGIC INC.
XX
PI   Beazer-Barclay Y,  Weissman SM,  Yamaga S,  Vockley J;
XX
DR   WPI; 2002-435328/46.
XX
```

```
PT   Detecting granulocyte activation by detecting differential expression of
PT   genes associated with granulocyte activation, which serves as diagnostic
PT   markers that is useful for monitoring disease states and drug toxicity.
XX
PS   Claim 1; SEQ ID NO 134; 114pp; English.
XX
CC   The invention relates to detecting (M1) granulocyte (GC) activation
CC   (GCA), by detecting the level of expression of gene(s) (Gs) identified by
CC   DNA chip analysis as given in the specification, and comparing the
CC   expression level to an expression level in an unactivated GC, where
CC   differential expression of Gs is indicative of GCA. Also included are
CC   modulating (M2) GA by contacting GC with an agent that alters the
CC   expression of at least one gene in Gs; (2) screening (M3) for an agent
CC   capable of modulating GCA or an inflammation (especially chronic) in a
CC   tissue, an allergic response in a subject, exposure of a subject to a
CC   pathogen or sterile inflammatory disease using the gene expression
CC   profile; (3) detecting (M4) an inflammation (especially chronic) in a
CC   tissue, an allergic response in a subject, exposure of a subject to a
CC   pathogen or sterile inflammatory disease, by detecting the level of
CC   expression in a sample of the tissue of gene(s) from Gs, where the level
CC   of expression of the gene is indicative of inflammation; (4) treating
CC   (M5) an inflammation (especially chronic) or in a tissue, an allergic
CC   response in a subject, exposure of a subject to a pathogen or sterile
CC   inflammatory disease, by contacting a tissue having inflammation with an
CC   agent that modulates the expression of gene(s) from Gs in the tissue. M1
CC   is useful for detecting GCA; M2 is useful for modulating GA; M3 is useful
CC   for screening an agent capable of modulating GCA preferably in an
CC   inflammation in a tissue; M4 is useful for detecting an inflammation
CC   (especially chronic) in a tissue, an allergic response in a subject,
CC   exposure of a subject to a pathogen or sterile inflammatory disease (e.g.
CC   psoriasis, rheumatoid arthritis, glomerulonephritis, asthma, thrombosis,
CC   cardiac reperfusion injury, renal reperfusion injury, ARDS, adult
CC   respiratory distress syndrome, inflammatory bowel disease, Crohn's
CC   disease, ulcerative colitis, periodontal disease; also bacterial
CC   infection, viral infection, parasitic infection, protozoal infection,
CC   fungal infection and M5 is useful for treating one of the above
CC   conditions. The present sequence represents a gene differentially
CC   expressed in granulocytes. Note: The sequence data for this patent did
CC   not form part of the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 57248 BP; 15003 A; 13601 C; 13307 G; 15337 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 6;  Length 57248;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2888 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTG 2932
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Db      31301 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTG 31345


RESULT 166
ABD32902
ID   ABD32902 standard; DNA; 65277 BP.
XX
AC   ABD32902;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Human cancer-associated genomic DNA HD18-038.
XX
KW   Human; ds; cancer-associated protein; gene; cytostatic; cancer;
KW   leukaemia; lymphoma; CAP.
XX
OS   Homo sapiens.
XX
PN   WO2004074320-A2.
XX
PD   02-SEP-2004.
XX
PF   17-FEB-2004; 2004WO-US004730.
XX
PR   14-FEB-2003; 2003US-00367094.
PR   14-MAR-2003; 2003US-00388838.
PR   15-APR-2003; 2003US-00417375.
PR   13-JUN-2003; 2003US-00461862.
PR   15-SEP-2003; 2003US-00663431.
PR   15-DEC-2003; 2003US-00737318.
XX
PA   (SAGR-) SAGRES DISCOVERY INC.
XX
PI   Morris DW,  Morris DW,  Malandro MS;
XX
DR   WPI; 2004-652914/63.
XX
PT   New isolated cancer-associated polynucleotides and polypeptides useful
PT   for diagnosing, preventing or treating cancers, especially lymphoma and
PT   leukemia, or in screening for agents that modulate cancer.
XX
PS   claim 16; seqid 602; 310pp; English.
XX
CC   The invention relates to an isolated nucleic acid comprising at least 10
CC   contiguous nucleotides of any of the 233 polynucleotide sequences given
CC   in the specification, or its complement. The nucleic acids encode cancer-
CC   associated proteins. Also included are an expression vector comprising
CC   the isolated nucleic acid cited above, a host cell comprising the above
CC   recombinant nucleic acid or expression vector, a microarray for detecting
CC   a cancer-associated (CA) nucleic acid comprising at least one probe
CC   comprising at least 10 contiguous nucleotides of any of the above-
CC   mentioned nucleotide sequences, an isolated polypeptide (encoded within
CC   an open reading frame of a CA sequence selected from any of the 95
CC   polynucleotide sequences as mentioned in the specification, or its
CC   complement), an isolated antibody, (or its antigen binding fragment) that
CC   binds to the above polypeptide, a hybridoma that produces the above
CC   monoclonal antibody, a pharmaceutical composition comprising the above
CC   antibody and a pharmaceutical excipient, a kit for detecting cancer
CC   cells(comprising the antibody cited above, methods for diagnosing cancer
CC   or for detecting the presence or absence of cancer cells in an
CC   individual, a method for inhibiting growth of cancer cells in an
CC   individual, a method for delivering a therapeutic agent to cancer cells
CC   in an individual, an electronic library comprising the above
CC   polynucleotide or polypeptide (or their fragments), methods of screening
CC   for anticancer activity or for a bioactive agent capable of modulating
CC   the activity of a CA protein (CAP), methods for detecting cancer
CC   associated with expression of a polypeptide in a test cell sample, a
CC   method for treating cancers and a method for inhibiting the expression of
CC   CA gene in a cell. The composition and methods are useful for detecting,
CC   diagnosing, preventing and treating cancers, especially lymphoma and
CC   leukaemia. These may also be used in screening for agents that modulate
CC   cancer. The present sequence is a human CAP genomic sequence. Note: The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 65277 BP; 19651 A; 11706 C; 12664 G; 21256 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 13;  Length 65277;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2899 GATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAGC 2943
             |||||||||||||||||||||||||||||||||||||||||||||
Db      27320 GATCACCTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATAGC 27364


RESULT 167
ACN43986/c
ID   ACN43986 standard; DNA; 73995 BP.
XX
AC   ACN43986;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Human genomic sequence hCG40211.
```

```
XX
KW   Cytostatic; carcinoma; lymphoma; cancer; human; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003073826-A2.
XX
PD   12-SEP-2003.
XX
PF   28-FEB-2003; 2003WO-US006235.
XX
PR   01-MAR-2002; 2002US-00087192.
XX
PA   (SAGR-) SAGRES DISCOVERY.
XX
PI   Morris DW;
XX
DR   WPI; 2003-328604/31.
XX
PT   Recombinant nucleic acid useful for diagnosis and treatment of carcinoma
PT   comprises a nucleotide sequence.
XX
PS   Claim 1; SEQ ID NO 208; 0pp; English.
XX
CC   The present invention relates to novel DNA and protein sequences which
CC   are associated with carcinomas. The sequences are useful for: (i) for
CC   screening drug candidates; (ii) for screening of bioactive agent capable
CC   of binding to Carcinoma Associated Protein (CAP); (iii) for screening of
CC   a bioactive agent capable of modulating the activity of CAP; (iv) for
CC   evaluating the effect of a candidate carcinoma drug; (v) for diagnosing
CC   carcinoma; (vi) for inhibiting the activity of CAP; (vii) for treating
CC   carcinoma; (viii) for neutralizing the effect of CAP; (ix) as a biochip;
CC   (x) for diagnosing carcinoma or a propensity to carcinoma; and (xi) for
CC   determining Carcinoma Associated (CA) gene copy number. In addition, the
CC   CA genes are useful as DNA vaccines and the CAP are useful as markers of
CC   carcinoma including lymphoma. The present sequence is one such CA coding
CC   sequence. Note: This patent is an equivalent to basic patent
CC   US2002182586A1, for which no sequence data was published
XX
SQ   Sequence 73995 BP; 17594 A; 18402 C; 19247 G; 18752 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 11;  Length 73995;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
              |||||||||||||||||||||||||||||||||||||||||||||
Db      27485 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 27441


RESULT 168
ACA64942
ID   ACA64942 standard; DNA; 78539 BP.
XX
AC   ACA64942;
XX
DT   27-JUN-2003  (first entry)
XX
DE   Human FRAP1 DNA corresponding to AL049659.
XX
KW   Human; chronic inflammatory joint disease; infection; tumour;
KW   antiinflammatory; cytostatic; antiarthritic; antirheumatic;
KW   immunosuppressive; gene therapy; etiological pathogenicity; ds.
XX
OS   Homo sapiens.
XX
PN   DE10127572-A1.
XX
PD   05-DEC-2002.
XX
PF   30-MAY-2001; 2001DE-01027572.
XX
PR   30-MAY-2001; 2001DE-01027572.
XX
PA   (PATH-) PATHOARRAY GMBH.
XX
PI   Haeupl T,  Ungethuem U,  Blaess S;
XX
DR   WPI; 2003-240797/24.
XX
PT   Reagents for diagnosis, study and therapy of chronic inflammatory joint
PT   and other diseases, comprises any of many specified genes or derived
PT   proteins.
XX
PS   Claim 1; Page; 12pp; German.
XX
CC   This invention describes a novel reagent for diagnosis, molecular
CC   definition and therapy of chronic inflammatory joint diseases, and other
CC   inflammatory disorders, infective or tumour diseases in humans. The
CC   products of the invention have antiinflammatory, cytostatic,
CC   antiarthritic, antirheumatic and immunosuppressive activity and can be
CC   used for gene therapy. The reagent of the invention and any proteins and
CC   antibodies derived from it, are used (i) for analysing tissue and blood
CC   samples for medical diagnosis; (ii) for diagnosis and characterisation of
CC   chronic joint diseases, on the basis of molecular characterisation, and
CC   determining the etiological pathogenicity principle of as yet
CC   uncharacterised inflammatory diseases, also monitoring progression and/or
CC   treatment of disease, and optimisation of therapy and (iii) for
CC   developing treatments for inflammatory diseases, particularly of joints,
CC   infections and tumours. ACA64801-ACA64965 represent human polynucleotides
CC   used in the method of the invention
XX
SQ   Sequence 78539 BP; 23554 A; 17605 C; 17140 G; 20240 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 8;  Length 78539;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
              |||||||||||||||||||||||||||||||||||||||||||||
Db      56640 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 56684


RESULT 169
ADO79404/c
ID   ADO79404 standard; DNA; 89900 BP.
XX
AC   ADO79404;
XX
DT   26-AUG-2004  (first entry)
XX
DE   DPF3 region, SEQ ID 3.
XX
KW   Cytostatic; Gene therapy; breast cancer; human; DLG1; KIAA0783; DPF3;
KW   CENPC1; gene; ds; SNP; single nucleotide polymorphism;
KW   D4, zinc and double PHD fingers, family 3; CERD4; cer-d4; FLJ14079;
KW   2810403B03Rik; Rho family guanine-nucleotide exchange factor;
KW   chromosome 14q24.3-q31.1.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   variation       160
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FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a A/C SNP"
FT   variation       6053
FT                   /*tag=  b
FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a T/G SNP"
FT   variation       9719
FT                   /*tag=  c
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FT                   /note= "This SNP is described as a A/G SNP"
FT   variation       10481
FT                   /*tag=  d
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FT                   /note= "This SNP is described as a T/C SNP"
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FT                   /note= "This SNP is described as a A/T SNP"
FT   variation       17179
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FT                   /note= "This SNP is described as a C/G SNP"
FT   variation       18561
FT                   /*tag=  g
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FT                   /note= "This SNP is described as a A/T SNP"
FT   variation       18658
FT                   /*tag=  h
FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a G/C SNP"
FT   variation       18694
FT                   /*tag=  i
FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a A/G SNP"
FT   variation       18858
FT                   /*tag=  j
FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a T/C SNP"
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FT   variation       24767
FT                   /*tag=  m
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FT   variation       27402
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FT                   /note= "This SNP is described as a A/G SNP"
FT   variation       28150
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FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a T/G SNP"
FT   variation       28494
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FT   variation       32003
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FT   variation       35588
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT   variation       35619
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FT   variation       35856
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FT                   /standard_name= "Single nucleotide polymorphism"
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FT   variation       42593
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FT                   /note= "This SNP is described as a A/C SNP"
FT   variation       42799
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FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a A/G SNP"
FT   variation       43090
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FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a G/A SNP"
FT   variation       46683
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FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a A/G SNP"
FT   variation       49774
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FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a A/G SNP"
FT   variation       51796
FT                   /*tag=  ad
FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a T/C SNP"
FT   variation       52079
FT                   /*tag=  ae
FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a A/T SNP"
FT   variation       53857
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FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a T/C SNP"
FT   variation       53971
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FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a A/C SNP"
FT   variation       55899
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FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a T/C SNP"
FT   variation       60682
FT                   /*tag=  ai
FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a G/A SNP"
FT   variation       61291
FT                   /*tag=  aj
FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a T/C SNP"
FT   variation       72720
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FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a G/A SNP"
FT   variation       72752
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FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a A/C SNP"
FT   variation       85507
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FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a A/G SNP"
FT   variation       89751
FT                   /*tag=  an
FT                   /standard_name= "Single nucleotide polymorphism"
FT                   /note= "This SNP is described as a T/A SNP"
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XX
PN WO2004047514-A2.
XX
PD 10-JUN-2004.
XX
PF 25-NOV-2003; 2003WO-US037943.
XX
PR 25-NOV-2002; 2002US-0429136P.
PR 24-JUL-2003; 2003US-0490234P.
XX
PA (SEQU-) SEQUENOM INC.
XX
PI Roth RB, Nelson MR, Braun A, Kammerer SM, Reneland R;
XX
DR WPI; 2004-441037/41.
XX
PT Identifying a subject at risk of breast cancer by detecting the presence
PT of polymorphic variations in the DLG1, KIAA0783, DPF3 or CENPC1 regions
PT which are associated with breast cancer in a nucleic acid sample from a
PT subject.
XX
PS Claim 24; Fig 3; 227pp; English.
XX

Query Match 1.4%; Score 45; DB 12; Length 89900;
Best Local Similarity 100.0%; Pred. No. 2.7e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db 59096 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 59052

RESULT 170
ABD33524/c
ID ABD33524 standard; DNA; 107543 BP.
XX
AC ABD33524;
XX
DT 18-NOV-2004 (first entry)
XX
DE Human cancer-associated (CA) gene HD07-103.
XX
KW Human; cancer-associated protein; CAP; cancer-associated gene; CA; gene;
KW ds; cancer; cytostatic.
XX
OS Homo sapiens.
XX
PN WO2004058146-A2.
XX
PD 15-JUL-2004.
XX
PF 15-DEC-2003; 2003WO-US040081.
XX
PR 17-DEC-2002; 2002US-00322281.
XX
PA (SAGR-) SAGRES DISCOVERY INC.
XX
PI Morris DW, Malandro MS;
XX
DR WPI; 2004-499109/47.
XX
PT Novel human cancer associated protein encoded within open reading frame
PT of cancer associated gene, useful as targets for diagnosing cancer.
XX
PS Claim 16; SEQ ID NO 706; 182pp; English.
XX
CC The invention relates to cancer-associated proteins (CAP) and the cancer-
CC associated (CA) nucleic acids encoding them. The invention also relates
CC to a method for treating cancers involving administering to a patient an
CC inhibitor of CAP, and a method of screening for anticancer activity in a
CC potential drug involving providing a cell that expresses a CA gene,
CC contacting a tissue sample derived from a cancer cell with an anticancer
CC drug candidate and monitoring the effect of the anticancer drug candidate
CC on expression of the CA gene. The CAP proteins are useful for detecting
CC cancer associated with expression of a CAP protein in a test cell sample
CC and for screening for a bioactive agent capable of modulating the
CC activity of a CAP protein. The CA nucleic acids are useful for diagnosing
CC cancer, involving determining the expression of a CA nucleic acid in a
CC tissue. This sequence represents a human CA gene of the invention. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 107543 BP; 30009 A; 20779 C; 22714 G; 34041 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 13; Length 107543;
Best Local Similarity 100.0%; Pred. No. 2.7e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
||||||||||||||||||||||||||||||||||||||||||||||
Db 39889 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 39845

RESULT 171
ABD33242/c
ID ABD33242 standard; DNA; 107745 BP.
XX
AC ABD33242;
XX
DT 18-NOV-2004 (first entry)
XX
DE Human cancer-associated (CA) gene HD07-040.
XX
KW Human; cancer-associated protein; CAP; cancer-associated gene; CA; gene;
KW ds; cancer; cytostatic.
XX
OS Homo sapiens.
XX
PN WO2004058146-A2.
XX
PD 15-JUL-2004.
XX
PF 15-DEC-2003; 2003WO-US040081.
XX
PR 17-DEC-2002; 2002US-00322281.
XX
PA (SAGR-) SAGRES DISCOVERY INC.
XX
PI Morris DW, Malandro MS;
XX
DR WPI; 2004-499109/47.
XX
PT Novel human cancer associated protein encoded within open reading frame
PT of cancer associated gene, useful as targets for diagnosing cancer.
XX
PS Claim 16; SEQ ID NO 268; 182pp; English.
XX
CC The invention relates to cancer-associated proteins (CAP) and the cancer-
CC associated (CA) nucleic acids encoding them. The invention also relates
CC to a method for treating cancers involving administering to a patient an
CC inhibitor of CAP, and a method of screening for anticancer activity in a
CC potential drug involving providing a cell that expresses a CA gene,
CC contacting a tissue sample derived from a cancer cell with an anticancer
CC drug candidate and monitoring the effect of the anticancer drug candidate
CC on expression of the CA gene. The CAP proteins are useful for detecting
CC cancer associated with expression of a CAP protein in a test cell sample
CC and for screening for a bioactive agent capable of modulating the
CC activity of a CAP protein. The CA nucleic acids are useful for diagnosing
CC cancer, involving determining the expression of a CA nucleic acid in a
CC tissue. This sequence represents a human CA gene of the invention. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX

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SQ   Sequence 107745 BP; 27670 A; 22736 C; 24082 G; 32763 T; 0 U; 494 Other;

  Query Match             1.4%;  Score 45;  DB 13;  Length 107745;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
              |||||||||||||||||||||||||||||||||||||||||||||
Db      21081 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 21037


RESULT 172
ABL57909_2
Continuation (3 of 4) of ABL57909 from base 200001 (Human transporter protein gene. )
WP Sequence split into 4 fragments  LOCUS ABL57909 Accession Abl57909
WP      Fragment Name       Begin      End
WP      ABL57909_0              1    110000
WP      ABL57909_1         100001    210000
WP      ABL57909_2         200001    310000
WP      ABL57909_3         300001    368004

  Query Match             1.4%;  Score 45;  DB 6;  Length 110000;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACT 3115
              |||||||||||||||||||||||||||||||||||||||||||||
Db      52355 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACT 52399


RESULT 173
ABX08336_03/c
Continuation (4 of 17) of ABX08336 from base 300001 (Human phosphodiesterase 4D (PDE4D)
WP Sequence split into 17 fragments  LOCUS ABX08336 Accession Abx08336
WP      Fragment Name       Begin      End
WP      ABX08336_00             1    110000
WP      ABX08336_01        100001    210000
WP      ABX08336_02        200001    310000
WP      ABX08336_03        300001    410000
WP      ABX08336_04        400001    510000
WP      ABX08336_05        500001    610000
WP      ABX08336_06        600001    710000
WP      ABX08336_07        700001    810000
WP      ABX08336_08        800001    910000
WP      ABX08336_09        900001   1010000
WP      ABX08336_10       1000001   1110000
WP      ABX08336_11       1100001   1210000
WP      ABX08336_12       1200001   1310000
WP      ABX08336_13       1300001   1410000
WP      ABX08336_14       1400001   1510000
WP      ABX08336_15       1500001   1610000
WP      ABX08336_16       1600001   1691080

  Query Match             1.4%;  Score 45;  DB 6;  Length 110000;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
              |||||||||||||||||||||||||||||||||||||||||||||
Db      61071 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 61027


RESULT 174
AAD53224_2/c
Continuation (3 of 6) of AAD53224 from base 200001 (Human chromosome 3 q-arm breakpoint
WP Sequence split into 6 fragments  LOCUS AAD53224 Accession Aad53224
WP      Fragment Name       Begin      End
WP      AAD53224_0              1    110000
WP      AAD53224_1         100001    210000
WP      AAD53224_2         200001    310000
WP      AAD53224_3         300001    410000
WP      AAD53224_4         400001    510000
WP      AAD53224_5         500001    567571

  Query Match             1.4%;  Score 45;  DB 8;  Length 110000;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
              |||||||||||||||||||||||||||||||||||||||||||||
Db      99432 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 99388


RESULT 175
ADJ25985_03/c
Continuation (4 of 17) of ADJ25985 from base 300001 (Human phosphodiesterase 4D (PDE4D)
WP Sequence split into 17 fragments  LOCUS ADJ25985 Accession Adj25985
WP      Fragment Name       Begin      End
WP      ADJ25985_00             1    110000
WP      ADJ25985_01        100001    210000
WP      ADJ25985_02        200001    310000
WP      ADJ25985_03        300001    410000
WP      ADJ25985_04        400001    510000
WP      ADJ25985_05        500001    610000
WP      ADJ25985_06        600001    710000
WP      ADJ25985_07        700001    810000
WP      ADJ25985_08        800001    910000
WP      ADJ25985_09        900001   1010000
WP      ADJ25985_10       1000001   1110000
WP      ADJ25985_11       1100001   1210000
WP      ADJ25985_12       1200001   1310000
WP      ADJ25985_13       1300001   1410000
WP      ADJ25985_14       1400001   1510000
WP      ADJ25985_15       1500001   1610000
WP      ADJ25985_16       1600001   1691139

  Query Match             1.4%;  Score 45;  DB 12;  Length 110000;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
              |||||||||||||||||||||||||||||||||||||||||||||
Db      61070 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 61026


RESULT 176
ADN97989_03/c
Continuation (4 of 17) of ADN97989 from base 300001 (Human phosphodiesterase 4D genomic
WP Sequence split into 17 fragments  LOCUS ADN97989 Accession Adn97989
WP      Fragment Name       Begin      End
WP      ADN97989_00             1    110000
WP      ADN97989_01        100001    210000
WP      ADN97989_02        200001    310000
WP      ADN97989_03        300001    410000
WP      ADN97989_04        400001    510000
WP      ADN97989_05        500001    610000
WP      ADN97989_06        600001    710000
WP      ADN97989_07        700001    810000
WP      ADN97989_08        800001    910000
WP      ADN97989_09        900001   1010000
WP      ADN97989_10       1000001   1110000
WP      ADN97989_11       1100001   1210000
WP      ADN97989_12       1200001   1310000
WP      ADN97989_13       1300001   1410000
WP      ADN97989_14       1400001   1510000
WP      ADN97989_15       1500001   1610000
WP      ADN97989_16       1600001   1691138

  Query Match             1.4%;  Score 45;  DB 12;  Length 110000;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
              |||||||||||||||||||||||||||||||||||||||||||||
Db      61071 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 61027
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RESULT 177
ADO50281_03/c
Continuation (4 of 17) of ADO50281 from base 300001 (Human phosphodiesterase 4D (PDE4D)
WP Sequence split into 17 fragments  LOCUS ADO50281 Accession Ado50281
WP      Fragment Name       Begin      End
WP      ADO50281_00             1    110000
WP      ADO50281_01        100001    210000
WP      ADO50281_02        200001    310000
WP      ADO50281_03        300001    410000
WP      ADO50281_04        400001    510000
WP      ADO50281_05        500001    610000
WP      ADO50281_06        600001    710000
WP      ADO50281_07        700001    810000
WP      ADO50281_08        800001    910000
WP      ADO50281_09        900001   1010000
WP      ADO50281_10       1000001   1110000
WP      ADO50281_11       1100001   1210000
WP      ADO50281_12       1200001   1310000
WP      ADO50281_13       1300001   1410000
WP      ADO50281_14       1400001   1510000
WP      ADO50281_15       1500001   1610000
WP      ADO50281_16       1600001   1691134

  Query Match             1.4%;  Score 45;  DB 12;  Length 110000;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
              |||||||||||||||||||||||||||||||||||||||||||||
Db      61070 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 61026


RESULT 178
AEB85185_03/c
Continuation (4 of 17) of AEB85185 from base 300001 (Human phosphodiesterase 4D gene SEQ
WP Sequence split into 17 fragments  LOCUS AEB85185 Accession Aeb85185
WP      Fragment Name       Begin      End
WP      AEB85185_00             1    110000
WP      AEB85185_01        100001    210000
WP      AEB85185_02        200001    310000
WP      AEB85185_03        300001    410000
WP      AEB85185_04        400001    510000
WP      AEB85185_05        500001    610000
WP      AEB85185_06        600001    710000
WP      AEB85185_07        700001    810000
WP      AEB85185_08        800001    910000
WP      AEB85185_09        900001   1010000
WP      AEB85185_10       1000001   1110000
WP      AEB85185_11       1100001   1210000
WP      AEB85185_12       1200001   1310000
WP      AEB85185_13       1300001   1410000
WP      AEB85185_14       1400001   1510000
WP      AEB85185_15       1500001   1610000
WP      AEB85185_16       1600001   1691140

  Query Match             1.4%;  Score 45;  DB 14;  Length 110000;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
              |||||||||||||||||||||||||||||||||||||||||||||
Db      61071 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 61027


RESULT 179
ADQ17592
ID   ADQ17592 standard; DNA; 116561 BP.
XX
AC   ADQ17592;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Human soft tissue sarcoma-upregulated DNA - SEQ ID 409.
XX
KW   soft tissue sarcoma; cytostatic; gene therapy; vaccine; screening; human;
KW   ds.
XX
OS   Homo sapiens.
XX
PN   WO2004048938-A2.
XX
PD   10-JUN-2004.
XX
PF   26-NOV-2003; 2003WO-US038193.
XX
PR   26-NOV-2002; 2002US-0429739P.
XX
PA   (PROT-) PROTEIN DESIGN LABS INC.
XX
PI   Aziz N,  Ginsburg WM,  Zlotnik A;
XX
DR   WPI; 2004-441208/41.
XX
PT   Early detection of soft tissue sarcoma comprises determining expression
PT   of a gene in a first soft tissue sample and a normal soft tissue sample
PT   and comparing the gene expression, also useful in treating soft tissue
PT   sarcoma.
XX
PS   Example 2; SEQ ID NO 409; 210pp; English.
XX
CC   The invention relates to a novel method for detecting soft tissue sarcoma
CC   which comprises obtaining a first soft tissue sample from an individual
CC   and a normal soft tissue sample from the same or different individual,
CC   determining the expression of a gene in both samples and comparing the
CC   expression of the gene in both soft tissue samples, where a higher level
CC   of protein expression in the first soft tissue sample indicates the
CC   presence of soft tissue sarcoma. The method of the invention has
CC   cytostatic applications and may be useful for detecting soft tissue
CC   sarcoma, possibly via gene therapy or vaccine production. The nucleic
CC   acid sequences may be useful in diagnostic and screening applications.
CC   The current sequence is that of a human soft tissue sarcoma-upregulated
CC   DNA of the invention. The current sequence is not shown within the
CC   specification per se but was submitted in CD format by the inventor.
XX
SQ   Sequence 116561 BP; 32234 A; 27837 C; 28253 G; 28237 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 12;  Length 116561;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
              |||||||||||||||||||||||||||||||||||||||||||||
Db     104267 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 104311


RESULT 180
ABT10719
ID   ABT10719 standard; cDNA; 122748 BP.
XX
AC   ABT10719;
XX
DT   04-DEC-2002  (first entry)
XX
DE   Human breast cancer associated coding sequence SEQ ID NO: 853.
XX
KW   Human; breast specific gene; breast cancer; differential expression;
KW   cytostatic; gene therapy; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200259271-A2.
XX
PD   01-AUG-2002.
XX
PF   25-JAN-2002; 2002WO-US002176.
```

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XX
PR   25-JAN-2001; 2001US-0263757P.
PR   25-APR-2001; 2001US-0286090P.
PR   23-MAY-2001; 2001US-0292517P.
XX
PA   (GENE-) GENE LOGIC INC.
XX
PI   Orr MS,  Nation M,  Diggans JC,  Zeng W;
XX
DR   WPI; 2002-674803/72.
XX
PT   Diagnosing breast cancer in a patient comprises detecting the level of
PT   gene expression in cell or tissue samples, where a differential gene
PT   expression is indicative of breast cancer.
XX
PS   Claim 1; SEQ ID NO 853; 260pp + Sequence Listing; English.
XX
CC   The present invention relates to methods of diagnosing breast cancer in a
CC   patient, which comprise detecting the level of expression in a tissue
CC   sample of two or more genes selected from those shown in ABT09867-
CC   ABT11112, where a differential expression of the genes indicates breast
CC   cancer. The methods are useful in diagnosing, treating, detecting the
CC   progression, and in monitoring treatment of breast cancer in patients.
CC   The methods are also useful as a screening tool for agents that modulate
CC   the onset or progression of breast cancer. The breast cancer genes may be
CC   used as diagnostic markers for the prediction or identification of the
CC   malignant state of breast tissue, for confirming the type and progression
CC   of cancer, and for drug screening and assays. The present sequence is a
CC   coding sequence of the invention. Note: The sequence data for this patent
CC   did not form part of the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub.published_pct_sequences
XX
SQ   Sequence 122748 BP; 32088 A; 31056 C; 30547 G; 29057 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 6;  Length 122748;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             |||||||||||||||||||||||||||||||||||||||||||||
Db      37876 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 37920


RESULT 181
ADL13909/c
ID   ADL13909 standard; DNA; 129588 BP.
XX
AC   ADL13909;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Osteoarthritis-associated polymorphic nucleotide #441.
XX
KW   ds; gene; osteopathic; antiinflammatory; antiarthritic; gene therapy;
KW   joint space narrowing; osteophyte development; joint pain;
KW   osteoarthritis; SNP; single nucleotide polymorphism.
XX
OS   Homo sapiens.
XX
PN   WO2003054166-A2.
XX
PD   03-JUL-2003.
XX
PF   19-DEC-2002; 2002WO-US041225.
XX
PR   20-DEC-2001; 2001US-0342603P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Jones KA,  Schafer A;
XX
DR   WPI; 2003-559141/52.
XX
PT   Determining susceptibility of an individual to joint space narrowing,
PT   osteophyte development and/or joint pain comprises identifying whether
PT   the individual has at least one polymorphism in a polynucleotide encoding
PT   a protein.
XX
PS   Disclosure; SEQ ID NO 441; 297pp; English.
XX
CC   The invention relates to a method of determining susceptibility of an
CC   individual to joint space narrowing and/or osteophyte development and/or
CC   joint pain comprising identifying whether the individual has at least one
CC   polymorphism in a polynucleotide encoding at least one of the protein
CC   listed in the specification. The methods, composition and agent are
CC   useful for modulating the susceptibility of an individual to joint space
CC   narrowing and/or osteophyte development and/or joint pain that is
CC   associated with a disease, preferably osteoarthritis. The cell line and
CC   the non-human animal are useful for screening for an agent for diagnosing
CC   an individual having susceptibility to joint space narrowing and/or
CC   osteophyte development and/or joint pain. This sequence corresponds to
CC   the polynucleotide encoding a protein listed in the specification. (Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification but was obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences).
XX
SQ   Sequence 129588 BP; 35710 A; 27530 C; 26424 G; 36620 T; 0 U; 3304 Other;

  Query Match             1.4%;  Score 45;  DB 10;  Length 129588;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3073 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCT 3117
             |||||||||||||||||||||||||||||||||||||||||||||
Db      27247 AGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCT 27203


RESULT 182
ABK84797/c
ID   ABK84797 standard; cDNA; 149671 BP.
XX
AC   ABK84797;
XX
DT   14-AUG-2002  (first entry)
XX
DE   Human cDNA differentially expressed in granulocytic cells #1368.
XX
KW   Human; ss; granulocytic cell; DNA chip; bacterial infection;
KW   viral infection; parasitic infection; protozoal infection;
KW   fungal infection; sterile inflammatory disease; psoriasis;
KW   rheumatoid arthritis; glomerulonephritis; asthma; thrombosis;
KW   cardiac reperfusion injury; renal reperfusion injury; ARDS;
KW   adult respiratory distress syndrome; inflammatory bowel disease;
KW   Crohn's disease; ulcerative colitis; periodontal disease;
KW   granulocyte activation; chronic inflammation; allergy.
XX
OS   Homo sapiens.
XX
PN   WO200228999-A2.
XX
PD   11-APR-2002.
XX
PF   03-OCT-2001; 2001WO-US030821.
XX
PR   03-OCT-2000; 2000US-0237189P.
XX
PA   (GENE-) GENE LOGIC INC.
XX
PI   Beazer-Barclay Y,  Weissman SM,  Yamaga S,  Vockley J;
XX
DR   WPI; 2002-435328/46.
XX
PT   Detecting granulocyte activation by detecting differential expression of
PT   genes associated with granulocyte activation, which serves as diagnostic
PT   markers that is useful for monitoring disease states and drug toxicity.
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```
XX
PS   Claim 1; SEQ ID NO 1368; 114pp; English.
XX
CC   The invention relates to detecting (M1) granulocyte (GC) activation
CC   (GCA), by detecting the level of expression of gene(s) (Gs) identified by
CC   DNA chip analysis as given in the specification, and comparing the
CC   expression level to an expression level in an unactivated GC, where
CC   differential expression of Gs is indicative of GCA. Also included are
CC   modulating (M2) GA by contacting GC with an agent that alters the
CC   expression of at least one gene in Gs; (2) screening (M3) for an agent
CC   capable of modulating GCA or an inflammation (especially chronic) in a
CC   tissue, an allergic response in a subject, exposure of a subject to a
CC   pathogen or sterile inflammatory disease using the gene expression
CC   profile; (3) detecting (M4) an inflammation (especially chronic) in a
CC   tissue, an allergic response in a subject, exposure of a subject to a
CC   pathogen or sterile inflammatory disease, by detecting the level of
CC   expression in a sample of the tissue of gene(s) from Gs, where the level
CC   of expression of the gene is indicative of inflammation; (4) treating
CC   (M5) an inflammation (especially chronic) or in a tissue, an allergic
CC   response in a subject, exposure of a subject to a pathogen or sterile
CC   inflammatory disease, by contacting a tissue having inflammation with an
CC   agent that modulates the expression of gene(s) from Gs in the tissue. M1
CC   is useful for detecting GCA; M2 is useful for modulating GA; M3 is useful
CC   for screening an agent capable of modulating GCA preferably in an
CC   inflammation in a tissue; M4 is useful for detecting an inflammation
CC   (especially chronic) in a tissue, an allergic response in a subject,
CC   exposure of a subject to a pathogen or sterile inflammatory disease (e.g.
CC   psoriasis, rheumatoid arthritis, glomerulonephritis, asthma, thrombosis,
CC   cardiac reperfusion injury, renal reperfusion injury, ARDS, adult
CC   respiratory distress syndrome, inflammatory bowel disease, Crohn's
CC   disease, ulcerative colitis, periodontal disease; also bacterial
CC   infection, viral infection, parasitic infection, protozoal infection,
CC   fungal infection and M5 is useful for treating one of the above
CC   conditions. The present sequence represents a gene differentially
CC   expressed in granulocytes. Note: The sequence data for this patent did
CC   not form part of the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 149671 BP; 45600 A; 33308 C; 32389 G; 38374 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 6;  Length 149671;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2888 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTG 2932
             |||||||||||||||||||||||||||||||||||||||||||||
Db      94008 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTG 93964


RESULT 183
ADB70361/c
ID   ADB70361 standard; cDNA; 149671 BP.
XX
AC   ADB70361;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Moesin cDNA SEQ ID NO:53.
XX
KW   cancer; malignant pleural mesothelioma; MPM; lung adenocarcinoma;
KW   squamous carcinoma; medulloblastoma; prostate cancer; breast cancer;
KW   diffuse large B-cell lymphoma; follicular lymphoma; ovarian cancer;
KW   human; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003021229-A2.
XX
PD   13-MAR-2003.
XX
PF   05-SEP-2002; 2002WO-US028203.
XX
PR   05-SEP-2001; 2001US-0317389P.
PR   30-AUG-2002; 2002US-00236031.
XX
PA   (BGHM ) BRIGHAM & WOMENS HOSPITAL INC.
XX
PI   Gordon GJ,  Jensen RV,  Gullans SR,  Bueno R;
XX
DR   WPI; 2003-290233/28.
DR   P-PSDB; ADB70362.
XX
PT   Diagnosing cancer cells in tissue sample, or determining prognosis or
PT   outcome of cancer patient, by calculating ratio of expression levels of
PT   genes that are differentially expressed in cancer and non cancer tissues.
XX
PS   Claim 67; Page 181-263; 396pp; English.
XX
CC   The present invention describes a method (M1) for diagnosing the presence
CC   of cancer cells or non-cancer cells in a tissue sample, or determining
CC   the prognosis or outcome of a cancer patient. M1 involves providing a set
CC   of genes that are differentially expressed in cancerous or non-cancerous
CC   conditions, determining the expression levels of the set of genes and
CC   calculating a ratio of the expression levels of the differentially
CC   expressed genes. M1 is useful for diagnosing the presence of cancer cells
CC   or non-cancer cells in a tissue sample, where the cancer is malignant
CC   pleural mesothelioma (MPM), lung adenocarcinoma, squamous carcinoma,
CC   medulloblastoma, prostate cancer, breast cancer, diffuse large B-cell
CC   lymphoma, follicular lymphoma and ovarian cancer, and for determining
CC   prognosis or outcome of a cancer patient. The ratio of expression levels
CC   of differentially expressed genes is used as an indicator of cancer type,
CC   cancer class, and/or cancer prognosis, all of which are useful for
CC   determining a course of treatment of a patient. The present sequence
CC   encodes a human protein which is used in an example from the present
CC   invention.
XX
SQ   Sequence 149671 BP; 45600 A; 33308 C; 32389 G; 38374 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 9;  Length 149671;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2888 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTG 2932
             |||||||||||||||||||||||||||||||||||||||||||||
Db      94008 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTG 93964


RESULT 184
ADJ37140/c
ID   ADJ37140 standard; cDNA; 149671 BP.
XX
AC   ADJ37140;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human malignant pleural mesothelioma (MPM) cDNA #23.
XX
KW   Human; malignant pleural mesothelioma; MPM; gene; ss; tumour;
KW   lung adenocarcinoma; squamous carcinoma; medulloblastoma;
KW   prostate cancer; breast cancer; diffuse large B-cell lymphoma;
KW   follicular lymphoma; ovarian cancer; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2003219760-A1.
XX
PD   27-NOV-2003.
XX
PF   05-SEP-2002; 2002US-00236031.
XX
PR   05-SEP-2001; 2001US-0317389P.
PR   30-AUG-2002; 2002US-0407431P.
XX
PA   (BGHM ) BRIGHAM & WOMENS HOSPITAL INC.
XX
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PI Gordon GJ, Jensen RV, Gullans SR, Bueno R;
XX
DR WPI; 2004-141744/14.
DR P-PSDB; ADJ37141.
XX
PT Diagnosing the presence of cancer or non-cancer cells in tissue sample,
PT useful for diagnosing malignant pleural mesothelioma comprises
PT determining ratio of expression level of a set of genes expressed in
PT cancer tissues.
XX
PS Claim 44; SEQ ID NO 53; 53pp; English.
XX
CC The invention relates to a method of diagnosing the presence of cancer
CC cells or non-cancer cells in a tissue sample, determining prognosis or
CC outcome of a cancer patient, selecting a course of treatment for a
CC subject having or suspected of having malignant pleural mesothelioma
CC (MPM) and evaluating treatment of MPM comprising determining the ratio of
CC the expression level of a set of genes differentially expressed in a
CC cancer tissue. The cancer is chosen from MPM, lung adenocarcinoma,
CC squamous carcinoma, medulloblastoma, prostate cancer, breast cancer,
CC diffuse large B-cell lymphoma, follicular lymphoma and ovarian cancer.
CC The method is useful for diagnosing MPM in a subject suspected of having
CC MPM which involves obtaining a tissue sample suspected of being cancerous
CC from a subject and determining the expression of nucleic acid markers or
CC its expression products in the tissue sample. This sequence represents
CC human MPM cDNA of the invention. Note: The sequence data for this patent
CC did not form part of the printed specification but was obtained in
CC electronic format directly from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 149671 BP; 45600 A; 33308 C; 32389 G; 38374 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 12; Length 149671;
Best Local Similarity 100.0%; Pred. No. 2.7e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2888 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTG 2932
||||||||||||||||||||||||||||||||||||||||||||
Db 94008 TGAGGCAGGTGGATCACCTGAGGCCAGGAGTTCGAGACCAGCCTG 93964

RESULT 185
ADZ13359
ID ADZ13359 standard; DNA; 171398 BP.
XX
AC ADZ13359;
XX
DT 16-JUN-2005 (first entry)
XX
DE Human cancer-associated genomic DNA #75.
XX
KW Diagnosis; DNA microarray; microarray; biochip; cancer; neoplasm;
KW cytostatic; gene; ds.
XX
OS Homo sapiens.
XX
PN WO2005031001-A2.
XX
PD 07-APR-2005.
XX
PF 23-SEP-2004; 2004WO-US031617.
XX
PR 23-SEP-2003; 2003US-00669920.
XX
PA (CHIR) CHIRON CORP.
XX
PI Morris DW, Malandro MS;
XX
DR WPI; 2005-273395/28.
XX
PT Nucleic acid array useful for detecting cancer associated nucleic acid,
PT comprises two or more nucleic acid probes.
XX
PS Disclosure; SEQ ID NO 879; 198pp; English.
XX
CC The invention relates to a nucleic acid array for detecting a cancer
CC associated (CA) nucleic acid, comprising two or more nucleic acid probes.
CC The invention also relates to a peptide array comprising two or more
CC isolated polypeptides encoded by a CA nucleic acid sequence, a compound
CC that binds to a polypeptide, an isolated antibody or its fragment which
CC binds to a polypeptide, which is prepared by immunizing a host animal
CC with a composition comprising the polypeptide or its antigen binding
CC fragment and collecting cells from the host expressing antibodies against
CC the antigen or its antigen binding fragment, a composition comprising the
CC antibody and a carrier, a method of screening for anticancer activity, a
CC method of detecting a CA nucleic acid, a method of diagnosing cancer, a
CC method of treating cancer and a method of inhibiting expression of a CA
CC nucleic acid in a cell. The CA nucleic acids are useful for detecting CA
CC nucleic acids. The antibody is useful for detecting the presence or
CC absence of cancer cells in an individual which involves contacting cells
CC from the individual with the antibody and detecting a complex of a CA
CC protein from the cancer cells and the antibody, where the detection of
CC the complex correlates with the presence of cancer cells in the
CC individual. The composition is useful for inhibiting growth of cancer
CC cells in an individual or for delivering a therapeutic agent to cancer
CC cells in an individual. The invention is also useful for diagnosing
CC cancer, for treating cancer and for inhibiting expression of a CA gene in
CC a cell. This sequence represents human cancer-associated genomic DNA of
CC the invention.
XX
SQ Sequence 171398 BP; 51304 A; 33907 C; 34019 G; 52168 T; 0 U; 0 Other;

Query Match 1.4%; Score 45; DB 14; Length 171398;
Best Local Similarity 100.0%; Pred. No. 2.7e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACT 3115
|||||||||||||||||||||||||||||||||||||||||||||
Db 84806 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACT 84850

RESULT 186
ADL13780
ID ADL13780 standard; DNA; 190117 BP.
XX
AC ADL13780;
XX
DT 06-MAY-2004 (first entry)
XX
DE Osteoarthritis-associated polymorphic nucleotide #312.
XX
KW ds; gene; osteopathic; antiinflammatory; antiarthritic; gene therapy;
KW joint space narrowing; osteophyte development; joint pain;
KW osteoarthritis; SNP; single nucleotide polymorphism.
XX
OS Homo sapiens.
XX
PN WO2003054166-A2.
XX
PD 03-JUL-2003.
XX
PF 19-DEC-2002; 2002WO-US041225.
XX
PR 20-DEC-2001; 2001US-0342603P.
XX
PA (INCY-) INCYTE GENOMICS INC.
XX
PI Jones KA, Schafer A;
XX
DR WPI; 2003-559141/52.
XX
PT Determining susceptibility of an individual to joint space narrowing,
PT osteophyte development and/or joint pain comprises identifying whether
PT the individual has at least one polymorphism in a polynucleotide encoding
PT a protein.
XX
PS Disclosure; SEQ ID NO 312; 297pp; English.

```
XX
CC   The invention relates to a method of determining susceptibility of an
CC   individual to joint space narrowing and/or osteophyte development and/or
CC   joint pain comprising identifying whether the individual has at least one
CC   polymorphism in a polynucleotide encoding at least one of the protein
CC   listed in the specification. The methods, composition and agent are
CC   useful for modulating the susceptibility of an individual to joint space
CC   narrowing and/or osteophyte development and/or joint pain that is
CC   associated with a disease, preferably osteoarthritis. The cell line and
CC   the non-human animal are useful for screening for an agent for diagnosing
CC   an individual having susceptibility to joint space narrowing and/or
CC   osteophyte development and/or joint pain. This sequence corresponds to
CC   the polynucleotide encoding a protein listed in the specification. (Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification but was obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences).
XX
SQ   Sequence 190117 BP; 47446 A; 48907 C; 48857 G; 44888 T; 0 U; 19 Other;

  Query Match             1.4%;  Score 45;  DB 10;  Length 190117;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-10;
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Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACT 3115
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Db      99468 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACT 99512


RESULT 187
ABD33586
ID   ABD33586 standard; DNA; 191584 BP.
XX
AC   ABD33586;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Human cancer-associated (CA) gene HD07-118.
XX
KW   Human; cancer-associated protein; CAP; cancer-associated gene; CA; gene;
KW   ds; cancer; cytostatic.
XX
OS   Homo sapiens.
XX
PN   WO2004058146-A2.
XX
PD   15-JUL-2004.
XX
PF   15-DEC-2003; 2003WO-US040081.
XX
PR   17-DEC-2002; 2002US-00322281.
XX
PA   (SAGR-) SAGRES DISCOVERY INC.
XX
PI   Morris DW,  Malandro MS;
XX
DR   WPI; 2004-499109/47.
XX
PT   Novel human cancer associated protein encoded within open reading frame
PT   of cancer associated gene, useful as targets for diagnosing cancer.
XX
PS   Claim 16; SEQ ID NO 800; 182pp; English.
XX
CC   The invention relates to cancer-associated proteins (CAP) and the cancer-
CC   associated (CA) nucleic acids encoding them. The invention also relates
CC   to a method for treating cancers involving administering to a patient an
CC   inhibitor of CAP, and a method of screening for anticancer activity in a
CC   potential drug involving providing a cell that expresses a CA gene,
CC   contacting a tissue sample derived from a cancer cell with an anticancer
CC   drug candidate and monitoring the effect of the anticancer drug candidate
CC   on expression of the CA gene. The CAP proteins are useful for detecting
CC   cancer associated with expression of a CAP protein in a test cell sample
CC   and for screening for a bioactive agent capable of modulating the
CC   activity of a CAP protein. The CA nucleic acids are useful for diagnosing
CC   cancer, involving determining the expression of a CA nucleic acid in a
CC   tissue. This sequence represents a human CA gene of the invention. Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 191584 BP; 57287 A; 37750 C; 38021 G; 58526 T; 0 U; 0 Other;

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Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACT 3115
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Db     106736 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACT 106780


RESULT 188
ADR67026
ID   ADR67026 standard; DNA; 191584 BP.
XX
AC   ADR67026;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Human cancer associated gene genomic sequence SEQ ID NO:72.
XX
KW   cancer; cancer associated nucleic acid; cancer associated gene;
KW   cancer associated protein; CAP; cytostatic; vaccine; gene therapy;
KW   lymphoma; leukaemia; human; gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO2004074321-A2.
XX
PD   02-SEP-2004.
XX
PF   17-FEB-2004; 2004WO-US005000.
XX
PR   14-FEB-2003; 2003US-00367094.
PR   14-MAR-2003; 2003US-00388838.
PR   23-SEP-2003; 2003US-00669920.
PR   15-DEC-2003; 2003US-00737318.
XX
PA   (SAGR-) SAGRES DISCOVERY INC.
XX
PI   Morris DW,  Malandro MS;
XX
DR   WPI; 2004-652915/63.
DR   P-PSDB; ADR67028.
XX
PT   New isolated cancer-associated polynucleotides and polypeptides useful
PT   for diagnosing, preventing or treating cancers, especially lymphoma and
PT   leukemia, or in screening for agents that modulate cancer.
XX
PS   Claim 16; SEQ ID NO 72; 166pp; English.
XX
CC   The present invention describes an isolated cancer associated (CA)
CC   nucleic acid (I). Also described: (1) an expression vector comprising (I)
CC   ; (2) a host cell comprising (I) or the expression vector; (3) a
CC   microarray for detecting a CA nucleic acid; (4) an isolated cancer
CC   associated protein (CAP) polypeptide, encoded within an open reading
CC   frame of a CA sequence; (5) an isolated antibody, or its antigen binding
CC   fragment, that binds to the above polypeptide; (6) a hybridoma that
CC   produces the above monoclonal antibody; (7) a pharmaceutical composition
CC   comprising the above antibody and a pharmaceutical excipient; (8) a kit
CC   for detecting cancer cells, comprising the (monoclonal) antibody
CC   described above; (9) methods for diagnosing cancer or for detecting the
CC   presence or absence of cancer cells in an individual; (10) a method for
CC   inhibiting growth of cancer cells in an individual; (11) a method for
CC   delivering a therapeutic agent to cancer cells in an individual; (12) an
CC   electronic library comprising the above polynucleotide or polypeptide, or
CC   their fragments; (13) methods of screening for anticancer activity or for
```

```
CC   a bioactive agent capable of modulating the activity of a CAP; (14)
CC   methods for detecting cancer associated with expression of a polypeptide
CC   in a test cell sample, or with the presence of an antibody in a test
CC   serum sample; (15) a method for treating cancers; and (16) a method for
CC   inhibiting the expression of CA gene in a cell. The CA sequences have
CC   cytostatic activity, and can be used in vaccines, and in gene therapy.
CC   The composition and methods are useful for detecting, diagnosing,
CC   preventing and treating cancers, especially lymphoma and leukaemia. They
CC   may also be used in screening for agents that modulate cancer. The
CC   present sequence represents a cancer associated gene genomic DNA
CC   sequence, which is used in the exemplification of the present invention.
XX
SQ   Sequence 191584 BP; 57287 A; 37750 C; 38021 G; 58526 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 45;  DB 13;  Length 191584;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3071 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACT 3115
             |||||||||||||||||||||||||||||||||||||||||||||
Db     106736 CAAGATTGTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACT 106780


RESULT 189
ADX98573/c
ID   ADX98573 standard; DNA; 285300 BP.
XX
AC   ADX98573;
XX
DT   05-MAY-2005  (first entry)
XX
DE   Human D4, zinc and double PHD fingers, family 3 (DPF3) genomic DNA.
XX
KW   SNP detection; breast tumor; endocrine disease;
KW   gynecology and obstetrics; neoplasm; cytostatic; metastasis;
KW   gene therapy; RNA interference; chromosome 14; ds; SNP;
KW   single nucleotide polymorphism;
KW   D4, zinc and double PHD fingers, family 3; DPF3;
KW   guanine-nucleotide exchange factor.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   variation       207
FT                   /*tag=  a
FT                   /standard_name= "Single nucleotide polymorphism (SNP)"
FT   variation       486
FT                   /*tag=  b
FT                   /standard_name= "Single nucleotide polymorphism (SNP)"
FT   variation       1745
FT                   /*tag=  c
FT                   /standard_name= "Single nucleotide polymorphism (SNP)"
FT   variation       1922
FT                   /*tag=  d
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FT   variation       2190
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FT   variation       2590
FT                   /*tag=  f
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FT   variation       2637
FT                   /*tag=  g
FT                   /standard_name= "Single nucleotide polymorphism (SNP)"
FT   variation       2804
FT                   /*tag=  h
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FT   variation       2806
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FT   variation       2895
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FT   variation       3185
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FT   variation       3642
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FT   variation       3805
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FT   variation       4959
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FT   variation       5009
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FT   variation       5676
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FT                   /standard_name= "Single nucleotide polymorphism (SNP)"
FT   variation       6507
FT                   /*tag=  v
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FT   variation       6695
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FT                   /standard_name= "Single nucleotide polymorphism (SNP)"
FT   variation       6717
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FT   variation       7131
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FT   variation       7873
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FT                   /standard_name= "Single nucleotide polymorphism (SNP)"
FT   variation       7922
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FT   variation       8652
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FT   variation       9817
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FT   variation       19395
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FT                   /standard_name= "Single nucleotide polymorphism (SNP)"
FT   variation       19527
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FT                   /standard_name= "Single nucleotide polymorphism (SNP)"
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FT                   /standard_name= "Single nucleotide polymorphism (SNP)"
FT   variation       20949
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FT   variation       21905
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FT                   /standard_name= "Single nucleotide polymorphism (SNP)"
FT   variation       22252
FT                   /*tag= bb
FT                   /standard_name= "Single nucleotide polymorphism (SNP)"
FT   variation       22941
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FT                   /standard_name= "Single nucleotide polymorphism (SNP)"
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FT   variation       24677
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FT                   /standard_name= "Single nucleotide polymorphism (SNP)"
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FT   variation       26136
FT                   /*tag= bi

  Query Match             1.4%;  Score 45;  DB 14;  Length 285300;
  Best Local Similarity   100.0%;  Pred. No. 2.6e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
              |||||||||||||||||||||||||||||||||||||||||||||
Db     220046 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 220002


RESULT 190
ADE86352
ID   ADE86352 standard; DNA; 300000 BP.
XX
AC   ADE86352;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human PTPN11 genomic DNA sequence SEQ ID NO:33.
XX
KW   Noonan syndrome; protein tyrosine phosphatase 11; PTPN11; mutant;
KW   variant; mutation; chromosome 12; enzyme; gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003029422-A2.
XX
PD   10-APR-2003.
XX
PF   01-OCT-2002; 2002WO-US031290.
XX
PR   01-OCT-2001; 2001US-0326532P.
XX
PA   (MOUN ) MOUNT SINAI SCHOOL MEDICINE.
XX
PI   Gelb BD,  Tartaglia M;
XX
DR   WPI; 2003-381624/36.
XX
PT   Diagnosing and treating Noonan syndrome in a subject using a mutation in
PT   a protein tyrosine phosphatase 11 gene with increased expression or
PT   activity.
XX
PS   Claim 24; SEQ ID NO 33; 262pp; English.
XX
CC   The present invention describes a method for diagnosing Noonan syndrome
CC   in a subject. The method comprises detecting a mutation in the protein
CC   tyrosine phosphatase 11 (PTPN11) gene in a subject, where the mutation
CC   results in increased PTPN11 expression or activity as compared to
CC   control. The human PTPN11 gene is located on chromosome 12, more
CC   specifically to 12q24. Also described: (1) a kit for diagnosing Noonan
CC   syndrome, comprising an oligonucleotide that specifically hybridises to
CC   or adjacent to a site of mutation of a PTPN11 gene that results in
CC   increased activity of a PTPN11 protein encoded by the gene or an antibody
CC   that specifically recognises a mutation in a PTPN11 protein, and
CC   instructions for use; (2) diagnosing Noonan syndrome in a subject,
CC   comprising assessing the level of expression or activity of a PTPN11
CC   protein in the test subject, and comparing it to the level of expression
CC   or activity in a control subject, where an increased expression or basal
CC   activity of the PTPN11 protein in the test subject compared to the
CC   control is indicative of Noonan syndrome; (3) treating Noonan syndrome in
CC   a patient, comprising administering an agent that modulates the
CC   expression or activity of a PTPN11 protein in association with a carrier;
CC   (4) an isolated PTPN11 variant comprising a mutation resulting in
CC   increased level of PTPN11 activity; (5) an isolated cell comprising a
CC   vector comprising a nucleic acid encoding the PTPN11 variant of (4),
CC   operatively associated with an expression control sequence; (6) an
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CC   isolated nucleic acid encoding the PTPN11 variant of (4); and (7) an
CC   isolated oligonucleotide which specifically hybridises to the nucleic
CC   acid of (6). The methods and compositions of the present invention are
CC   useful for diagnosing and treating a disorder associated with the
CC   aberrant expression and/or activity of the PTPN11 gene, specifically
CC   Noonan syndrome. The present sequence represents human PTPN11 genomic
CC   DNA, which is given in the exemplification of the present invention.
XX
SQ   Sequence 300000 BP; 84671 A; 64420 C; 64260 G; 85849 T; 0 U; 800 Other;

  Query Match             1.4%;  Score 45;  DB 10;  Length 300000;
  Best Local Similarity   100.0%;  Pred. No. 2.6e-10;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
             |||||||||||||||||||||||||||||||||||||||||||||
Db     105945 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 105989


RESULT 191
ADO14076
ID   ADO14076 standard; DNA; 300001 BP.
XX
AC   ADO14076;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Human protein tyrosine phosphatase 11 gene sequence SEQ ID NO:33.
XX
KW   protein tyrosine phosphatase gene 11; PTPN11; enzyme;
KW   protein tyrosine phosphatase gene 11 variant; PTPN11 variant;
KW   haematologic disorder; mutation; increased PTPN11 activity; cytostatic;
KW   neuroprotective; PTPN11 modulator; acute lymphoblastic leukaemia; ALL;
KW   acute myeloid leukaemia; AML; juvenile myelomonocytic leukaemia; JMML;
KW   myelodysplastic syndrome; MDS; cancer; pre-cancerous condition;
KW   lung cancer; colorectal cancer; pancreatic cancer; bladder cancer;
KW   kidney cancer; thyroid cancer; melanoma; leukaemia; human; chromosome 12;
KW   gene; ds.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   exon            123211. .123604
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FT                   /*tag=  j
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FT                   /*tag=  k
FT                   /number= 5
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FT                   /*tag=  l
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FT                   /*tag=  q
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FT                   /number= 9
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FT                   /number= 10
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FT                   /number= 11
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XX
PN   WO2004041216-A2.
XX
PD   21-MAY-2004.
XX
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PF 05-NOV-2003; 2003WO-US035349.
XX
PR 05-NOV-2002; 2002US-0424170P.
XX
PA (MOUN) MOUNT SINAI SCHOOL MEDICINE.
PA (UNIV-) UNIVERSITAETSKLINIKUM FREIBURG.
XX
PI Gelb BD, Tartaglia M, Niemeyer C;
XX
DR WPI; 2004-400526/37.
DR P-PSDB; ADO14045.
XX
PT Novel protein tyrosine phosphatase gene 11 variant, useful for
PT characterizing cancerous and precancerous conditions.
XX
PS Claim 12; SEQ ID NO 33; 279pp; English.
XX
CC The present invention describes an isolated protein tyrosine phosphatase
CC gene 11 (PTPN11) variant (I) associated with haematologic disorders, and
CC comprising a mutation resulting in an increased level of PTPN11 activity,
CC where the mutation corresponds to an amino acid substitution selected
CC from Asn58Tyr, Gly60Val, Asp61Tyr, Asp61Val, Glu69Lys, Phe71Lys,
CC Phe71Leu, Ala72Thr, Ala72Val, Ala72Asp, Glu76Lys, Glu76Gln, Glu76Val,
CC Glu76Gly, Glu76Ala, Pro491Ser, Pro491Leu, Ser502Pro, Gly503Arg,
CC Gly503Ala, Thr507Lys, Gln510Lys, and combinations of them, in the human
CC PTPN11 593 amino acid sequence of SEQ ID NO:2(ADO14045). Also described:
CC (1) characterising (M1) a haematologic disorder in a subject, which
CC involves detecting a mutation in the PTPN11 gene in the subject, where
CC the mutation results in an increased expression or activity of a PTPN11
CC protein encoded by the gene as compared to a control, or assessing the
CC level of expression or activity of a PTPN11 protein in the test subject
CC and comparing it to a control; (2) a kit (II) for diagnosing a
CC haematologic disorder; (3) treating (M2) a haematologic disorder in a
CC patient, which involves administering an agent that modulates the
CC expression or activity of PTPN11 protein and a carrier; (4) an isolated
CC cell (III) comprising a vector having (I), operatively associated with an
CC expression control sequence; (5) an isolated nucleic acid encoding (I);
CC and (6) characterising (M3) a cancer or pre-cancerous condition in a
CC subject, which involves detecting a mutation in the PTPN11 gene in the
CC subject, where the mutation results in an increased expression or
CC activity of a PTPN11 protein encoded by the gene as compared to a
CC control. (I) has cytostatic and neuroprotective activities, and can be
CC used as a modulator of PTPN11 activity. (M2) is useful for treating a
CC haematologic disorder such as acute lymphoblastic leukaemia (ALL), acute
CC myeloid leukaemia (AML), juvenile myelomonocytic leukaemia (JMML) and
CC myelodysplastic syndrome (MDS), in a patient. (M3) is useful for
CC characterising a cancer or pre-cancerous condition in a subject, where
CC the cancer is lung cancer, colorectal cancer, pancreatic cancer, bladder
CC cancer, kidney cancer, thyroid cancer, melanoma and leukaemia. The
CC present sequence represents the human PTPN11 gene sequence, which is used
CC in the exemplification of the present invention. The human PTPN11 gene is
CC located on chromosome 12, more specifically to 12q24.
XX
SQ Sequence 300001 BP; 84672 A; 64420 C; 64260 G; 85849 T; 0 U; 800 Other;

Query Match 1.4%; Score 45; DB 12; Length 300001;
Best Local Similarity 100.0%; Pred. No. 2.6e-10;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db 105945 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 105989

RESULT 192
ADJ12734
ID ADJ12734 standard; DNA; 116 BP.
XX
AC ADJ12734;
XX
DT 20-MAY-2004 (first entry)
XX
DE DNA fragment of a BAC clone that encodes a human secreted protein Seq588.
XX
KW human; secreted; cancer; haematopoietic disease; anaemia;
KW multiple myeloma; reproductive system disorder; prostatitis;
KW inguinal hernia; musculoskeletal disease; systemic lupus erythematosus;
KW gout; cardiovascular disease; arrhythmia; hypernatraemia; fetal disease;
KW fetal alcohol syndrome; Down's syndrome; excretory disease;
KW urinary incontinence; renal disorder; neural; sensory disease;
KW Alzheimer's disease; meningitis; respiratory disease; emphysema;
KW occupational lung disease; endocrine disease; diabetes;
KW glomerulonephritis; digestive disease; portal hypertension;
KW irritable bowel syndrome; epithelial disease; scleroderma;
KW epidermolysis bullosa; cytostatic; antianemic; antiarthritic;
KW antiasthmatic; anti-HIV; immunosuppressive; antiinflammatory;
KW antipsoriatic; antibacterial; osteopathic; dermatological; antigout;
KW immunomodulator; antiarrhythmic; cardiant; nootropic; antilipemic;
KW nephrotropic; uropathic; neuroprotective; antiparkinsonian; tranquilizer;
KW antidiabetic; anabolic; hypertensive; vulnerary; ds.
XX
OS Homo sapiens.
XX
PN US2004010132-A1.
XX
PD 15-JAN-2004.
XX
PF 30-OCT-2001; 2001US-00984429.
XX
PR 09-OCT-1997; 97US-0061463P.
PR 09-OCT-1997; 97US-0061527P.
PR 09-OCT-1997; 97US-0061529P.
PR 09-OCT-1997; 97US-0061532P.
PR 09-OCT-1997; 97US-0061536P.
PR 09-OCT-1997; 97US-0071498P.
PR 08-OCT-1998; 98WO-US021142.
PR 08-APR-1999; 99US-00288143.
PR 01-NOV-2000; 2000US-0244591P.
XX
PA (ROSE/) ROSEN C A.
PA (BREW/) BREWER L A.
PA (DUAN/) DUAN R D.
PA (RUBE/) RUBEN S M.
PA (FLOR/) FLORENCE K A.
PA (GREE/) GREENE J M.
PA (YOUN/) YOUNG P E.
PA (FERR/) FERRIE A M.
PA (YUGG/) YU G.
PA (FLOR/) FLORENCE C.
PA (EBNE/) EBNER R.
PA (OLSE/) OLSEN H.
XX
PI Rosen CA, Brewer LA, Duan RD, Ruben SM, Florence KA, Greene JM;
PI Young PE, Ferrie AM, Yu G, Florence C, Ebner R, Olsen H;
XX
DR WPI; 2004-090518/09.
XX
PT New isolated nucleic acids and polypeptides, useful for diagnosing,
PT treating, preventing or ameliorating diseases or disorders e.g. cancer,
PT anemia, arthritis, asthma, inflammatory bowel disease or Alzheimer's
PT disease.
XX
PS Disclosure; SEQ ID NO 588; 286pp; English.
XX
CC This invention relates to novel polynucleotides encoding human secreted
CC proteins. Specifically, it refers to the vectors, host cells, recombinant
CC and synthetic methods for producing human polynucleotides, polypeptides
CC and antibodies. Furthermore, it relates to screening methods to identify
CC agonists and antagonists that can be used to inhibit or enhance the
CC production and function of the secreted proteins. The present invention
CC describes these compositions as useful for diagnosing, treating or
CC preventing disorders such as cancer, haematopoietic diseases including
CC anaemia and multiple myeloma, reproductive system disorders including
CC prostatitis and inguinal hernia, musculoskeletal diseases including
CC systemic lupus erythematosus and gout, cardiovascular disease including
CC arrhythmia and hypernatraemia, mixed fetal diseases including fetal

CC alcohol syndrome and Down's syndrome, excretory diseases including
CC urinary incontinence and renal disorders, neural or sensory disease
CC including Alzheimer's disease and meningitis, respiratory disease
CC including emphysema and occupational lung disease, endocrine diseases
CC including diabetes and glomerulonephritis, digestive diseases including
CC portal hypertension and irritable bowel syndrome and connective tissue or
CC epithelial diseases including scleroderma and epidermolysis bullosa. As
CC such, there are various activites such as cytostatic, antianemic,
CC antiarthritic, antiasthmatic, anti-HIV, immunosuppressive,
CC antiinflammatory, antipsoriatic, antibacterial, osteopathic,
CC dermatological, antigout, immunomodulator, antiarrhythmic, cardiant,
CC nootropic, antilipemic, nephrotropic, uropathic, neuroprotective,
CC antiparkinsonian, tranquilizer, antidiabetic, anabolic, hypertensive and
CC vulnerary. This polynucleotide is a DNA fragment of a BAC clone that
CC encodes a human secreted protein of the invention. NOTE: This sequence
CC does not appear in the printed specification but has been obtained in
CC electronic format from the US patent office at the following web site
CC www.seqdata.uspto.gov/sequence.html; Document ID: 20040010132.
XX
SQ Sequence 116 BP; 35 A; 29 C; 35 G; 17 T; 0 U; 0 Other;

Query Match 1.4%; Score 44; DB 12; Length 116;
Best Local Similarity 100.0%; Pred. No. 1e-09;
Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3079 TGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db 63 TGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 106

RESULT 193
AAK67381
ID AAK67381 standard; DNA; 126 BP.
XX
AC AAK67381;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human immune/haematopoietic antigen genomic sequence SEQ ID NO:22193.
XX
KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS Homo sapiens.
XX
PN WO200157182-A2.
XX
PD 09-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001354.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
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PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
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PR 05-SEP-2000; 2000US-0229509P.
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PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.

PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 22193; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 126 BP; 38 A; 33 C; 36 G; 19 T; 0 U; 0 Other;

Query Match 1.4%; Score 44; DB 4; Length 126;
Best Local Similarity 100.0%; Pred. No. 1e-09;
Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3079 TGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db 72 TGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 115

RESULT 194
AAK74457/c
ID AAK74457 standard; DNA; 139 BP.
XX
AC AAK74457;
XX
DT 07-NOV-2001 (first entry)
XX
DE Human immune/haematopoietic antigen genomic sequence SEQ ID NO:29269.
XX
KW Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS Homo sapiens.
XX
PN WO200157182-A2.
XX
PD 09-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001354.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
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PR 06-SEP-2000; 2000US-0230437P.

PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
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PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
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PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
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PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
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PR 08-NOV-2000; 2000US-0246609P.
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PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
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PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 29269; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 139 BP; 21 A; 37 C; 32 G; 49 T; 0 U; 0 Other;

Query Match 1.4%; Score 44; DB 4; Length 139;
Best Local Similarity 100.0%; Pred. No. 1e-09;
Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3079 TGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
||||||||||||||||||||||||||||||||||||||||||||
Db 64 TGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 21

RESULT 195
AAC21835/c
ID AAC21835 standard; cDNA; 145 BP.
XX
AC AAC21835;
XX
DT 06-OCT-2000 (first entry)
XX
DE Human secreted protein 5' EST, SEQ ID NO: 25910.
XX
KW Human; 5' EST; expressed sequence tag; secreted protein; cDNA isolation;
KW gene therapy; chromosome mapping; ss.

XX
OS Homo sapiens.
XX
PN EP1033401-A2.
XX
PD 06-SEP-2000.
XX
PF 21-FEB-2000; 2000EP-00200610.
XX
PR 26-FEB-1999; 99US-0122487P.
XX
PA (GEST) GENSET.
XX
PI Dumas Milne Edwards J, Duclert A, Giordano J;
XX
DR WPI; 2000-500381/45.
XX
PT New nucleic acid that is a 5' expressed sequence tag (5' EST) for
PT obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for
PT diagnostic, forensic, gene therapy and chromosome mapping procedures.
XX
PS Claim 1; SEQ ID NO 25910; 71pp + Sequence Listing; English.
XX
CC The present sequence is one of a large number of 5' ESTs derived from
CC mRNAs encoding secreted proteins. No ORF has yet been conclusively
CC identified within the present sequence. The 5' ESTs were prepared from
CC total human RNAs or polyA+ RNAs derived from 30 different tissues. EST
CC sequences usually correspond mainly to the 3' untranslated region (UTR)
CC of the mRNA because they are often obtained from oligo-dT primed cDNA
CC libraries. Such ESTs are not well suited for isolating cDNA sequences
CC derived from the 5' ends of mRNAs and even in those cases where longer
CC cDNA sequences have been obtained, the full 5' UTR is rarely included. 5'
CC ESTs are derived from mRNAs with intact 5' ends and can therefore be used
CC to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in
CC diagnostic, forensic, gene therapy and chromosome mapping procedures.
CC They are used to obtain upstream regulatory sequences and to design
CC expression and secretion vectors
XX
SQ Sequence 145 BP; 25 A; 48 C; 38 G; 32 T; 0 U; 2 Other;

Query Match 1.4%; Score 44; DB 3; Length 145;
Best Local Similarity 100.0%; Pred. No. 1e-09;
Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3079 TGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 3122
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Db 47 TGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCTC 4

RESULT 196
AAK91189
ID AAK91189 standard; DNA; 182 BP.
XX
AC AAK91189;
XX
DT 05-NOV-2001 (first entry)
XX
DE Human digestive system antigen genomic sequence SEQ ID NO: 4765.
XX
KW Human; digestive system antigen; gene therapy; cancer; appendicitis;
KW ulcerative colitis; infection; Hirschsprung's disease; chronic colitis;
KW digestive system disorder; Meckel's diverticulum; ds.
XX
OS Homo sapiens.
XX
PN WO200155314-A2.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001324.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
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PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
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PR 11-JUL-2000; 2000US-0217496P.
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PR 02-OCT-2000; 2000US-0237038P.

PR 02-OCT-2000; 2000US-0237039P.
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PR 20-OCT-2000; 2000US-0241809P.
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PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
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PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
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PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-502630/55.
XX
PT Polynucleotides encoding digestive system antigens, useful for
PT diagnosing, treating, preventing and/or prognozing disorders of the
PT digestive system, particularly cancer and cancer metastases.
XX
PS Disclosure; SEQ ID NO 4765; 986pp; English.
XX
CC The present invention provides the protein and coding sequences of a
CC number of human digestive system antigens. These can be used in the
CC diagnosis, treatment and prevention of digestive system disorders,
CC including cancer, Meckel's diverticulum, bacterial or parasitic
CC infections, appendicitis, Hirschsprung's disease, chronic colitis or
CC ulcerative colitis. The present sequence is a genomic DNA fragment
CC encoding a digestive system antigen of the invention
XX
SQ Sequence 182 BP; 48 A; 44 C; 55 G; 35 T; 0 U; 0 Other;

Query Match 1.4%; Score 44; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 1e-09;
Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 3121
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Db 139 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 182

RESULT 197
AAS32121
ID AAS32121 standard; DNA; 182 BP.
XX
AC AAS32121;
XX
DT 04-DEC-2001 (first entry)
XX
DE Human liver associated genomic DNA #295.
XX
KW Liver associated protein; human; mouse; rabbit; goat; horse; cat; dog;
KW chicken; sheep; immunosuppressive; antiarthritic; vasotropic;
KW antirheumatic; antiproliferative; cytostatic; cardiant; neuroprotective;
KW cerebroprotective; nootropic; antibacterial; virucide; fungicide; cancer;
KW ophthalmological; vulnerary; gene therapy; autoimmune disease; neoplasm;
KW hyperproliferative disorder; breast; liver; cardiovascular disorder; ds;
KW cerebrovascular disorder; nervous system disorder; bacterial infection;
KW fungal infection; viral infection; ocular disorder; endocrine disorder;
KW gastrointestinal disorder; renal disorder; respiratory disorder;
KW wound healing; skin aging; organ transplantation; tissue regeneration;
KW anti-infertility.
XX
OS Homo sapiens.
XX
PN WO200155355-A1.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001351.
XX
PR 31-JAN-2000; 2000US-0179065P.
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PR 08-NOV-2000; 2000US-0246478P.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-457728/49.
XX
PT Isolated nucleic acid molecule encoding a human liver related protein is
PT used in preventing, treating or ameliorating disorders of the liver
PT particularly cancer of the liver.
XX
PS Claim 1; SEQ ID NO 597; 526pp; English.
XX
CC Sequences AAS31827-AAS32182 represent genomic DNA molecules, which encode
CC the liver associated polypeptides of the invention. Liver associated
CC polypeptides and their associated polynucleotides are useful in the
CC diagnosis, treatment and prevention of various types of disorders in e.g.
CC humans, mice, rabbits, goats, horses, cats, dogs, chickens or sheep. A
CC pathological condition can be determined by detecting the presence or
CC absence of a mutation in a liver associated polynucleotide. The treatable
CC disorders include autoimmune diseases such as rheumatoid arthritis,
CC hyperproliferative disorders such as neoplasms of the breast or liver,
CC cardiovascular disorders such as cardiac arrest, cerebrovascular
CC disorders such as cerebral ischaemia, nervous system disorders such as
CC Alzheimer's disease, infections caused by bacteria, viruses and fungi,
CC ocular disorders such as corneal infection, endocrine disorders such as
CC premature labour and infertility, gastrointestinal disorders such as
CC Crohn's disease, renal disorders such as glomerulonephritis and
CC respiratory disorders such as asthma and pleurisy. The polypeptides can
CC also be used to aid wound healing, to prevent skin aging due to sunburn,
CC to maintain organs before transplantation, to regenerate tissues and in
CC chemotaxis. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly

```
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 182 BP; 48 A; 44 C; 55 G; 35 T; 0 U; 0 Other;

  Query Match             1.4%;  Score 44;  DB 5;  Length 182;
  Best Local Similarity   100.0%;  Pred. No. 1e-09;
  Matches   44;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3078 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 3121
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Db        139 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 182


RESULT 198
ABN90476
ID   ABN90476 standard; DNA; 182 BP.
XX
AC   ABN90476;
XX
DT   24-JUL-2002  (first entry)
XX
DE   Human liver antigen HHLAB49 genomic sequence, SEQ ID NO:597.
XX
KW   Human; liver antigen; liver disorder; hepatic disorder; infection;
KW   hepatitis; viral; parasitic; bacterial; fungal; inflammatory condition;
KW   cirrhosis; granulomatous hepatitis; toxin damage; drug damage;
KW   autoimmune disease; Wilson's disease; primary biliary cirrhosis;
KW   neoplastic disorder; cancer; tumour; portal hypertension;
KW   gastrointestinal disorder; hepatitis; drug screening; gene therapy;
KW   chromosome mapping; forensic analysis; antibody preparation;
KW   hepatotropic; cytostatic; antiinflammatory; virucide; antibacterial;
KW   fungicide; parasiticide; antidote; immunosuppressive; gene; ds.
XX
OS   Homo sapiens.
XX
PN   US2002042096-A1.
XX
PD   11-APR-2002.
XX
PF   17-JAN-2001; 2001US-00764887.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   28-JUN-2000; 2000US-0214886P.
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PR   20-OCT-2000; 2000US-0241809P.
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XX
PA   (ROSE/) ROSEN C A.
PA   (RUBE/) RUBEN S M.
PA   (BARA/) BARASH S C.
XX
PI   Rosen CA,  Ruben SM,  Barash SC;
XX
DR   WPI; 2002-381944/41.
XX
PT   New nucleic acid encoding human liver antigens, useful for diagnosis,
PT   treatment and prevention of e.g. hepatitis and hepatic cancer, also
PT   related polypeptides and antibodies.
XX
PS   Disclosure; SEQ ID NO 597; 181pp; English.
XX
CC   The invention relates to 145 novel human liver antigens (ABP40831-
CC   ABP40975) and to cDNAs encoding them (ABN90036-ABN90180), and also
CC   encompasses polypeptides 90% identical and polynucleotides 95% identical
CC   to the sequences of the invention. The invention additionally relates to
CC   recombinant vectors and host cells comprising human liver antigen
CC   polynucleotides, antibodies against human liver antigens, and the use of
CC   liver antigen polynucleotides and polypeptides in diagnosing, treating,
CC   prognosing or preventing various disorders of the liver. Such conditions
CC   include viral infections (e.g., cytomegalovirus, Epstein-Barr virus,
CC   hepatitis A virus, hepatitis B virus and hepatitis C virus), parasitic
CC   infections (e.g., Clonorchis sinensis, Echinococcus granulosus and
CC   Entamoeba histolytica), and also bacterial and fungal infections. Other
CC   disorders that may be treated include inflammatory conditions (e.g.,
CC   cirrhosis and granulomatous hepatitis), damage caused by drugs or toxins,
CC   autoimmune diseases (e.g. Wilson's disease, primary biliary cirrhosis),
CC   neoplastic disorders (e.g., adenomas, haemangiomas and hepatocellular
CC   carcinoma), portal hypertension, or gastrointestinal disorders (e.g.,
CC   peptic ulcers, gastritis and peritoneal diseases). Liver antigen
CC   polypeptides and polynucleotides may also be used in screening for
CC   compounds which modulate liver antigen expression or activity. The
CC   polynucleotides may further be used for gene therapy, chromosome mapping,
CC   in the identification of individuals and in forensic analysis, and the
CC   polypeptides may be used as molecular weight markers or to prepare
CC   antibodies useful in disease diagnosis, drug targeting and phenotyping.
CC   Sequences ABN90182-ABN90537 represent human liver antigen genomic
CC   sequences. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from the USPTO at seqdata.uspto.gov/sequence/
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Db        139 GTGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGTCT 182
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AC   ADJ15389;
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DT   20-MAY-2004  (first entry)
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DE   Human liver-related genomic DNA - SEQ ID 597.
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KW   liver; virucide; fungicide; antibacterial; antiparasitic; hepatotropic;
KW   antiinflammatory; cytostatic; litholytic; antirheumatic; antiarthritic;
KW   neuroprotective; antidiabetic; anticoagulant; thrombolytic;
KW   antiarteriosclerotic; cardiant; haemostatic; antiarrhythmic;
KW   ophthalmological; antiarteriosclerotic; vasotropic; osteopathic;
KW   nootropic; antiparkinsonian; anticonvulsant; neuroleptic; vasotropic;
KW   cytostatic; gynaecological; viral; fungal; bacterial;
KW   parasitic infection; cirrhosis; Wilson's disease;
KW   gastrointestinal disorder; pancreatic; gallbladder; immune; blood;
KW   hyperproliferative; cardiovascular; respiratory; musculoskeletal system;
KW   neurological; endocrine; reproductive system; developmental; inherited;
KW   human; ds.
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OS   Homo sapiens.
XX
PN   US2003077602-A1.
XX
PD   24-APR-2003.
XX
PF   14-FEB-2002; 2002US-00073961.
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PR   17-JAN-2001; 2001US-00764887.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM,  Barash SC;
XX
DR   WPI; 2003-765398/72.
XX
PT   New liver related polypeptide, useful for diagnosis, treatment and/or
PT   prevention of liver, gastrointestinal, pancreatic, immune, blood related,
PT   endocrine, reproductive, hyperproliferative or reproductive disorders.
XX
PS   Disclosure; SEQ ID NO 597; 181pp; English.
XX
CC   The invention relates to a novel isolated, liver related polypeptide. The
CC   polypeptide of the invention demonstrates virucide, fungicide,
CC   antibacterial, antiparasitic, hepatotropic, antiinflammatory, cytostatic,
CC   litholytic, antirheumatic, antiarthritic, neuroprotective, antidiabetic,
CC   anticoagulant, thrombolytic, antiarteriosclerotic, cardiant, haemostatic,
CC   antiarrhythmic, ophthalmological, antiarteriosclerotic, vasotropic,
CC   osteopathic, nootropic, antiparkinsonian, anticonvulsant, neuroleptic,
CC   vasotropic, cytostatic and gynaecological activities. The polypeptides
CC   and polynucleotides of the invention may be useful for diagnosis,
CC   detection, treatment and/or prevention of disorders of the liver such as
CC   viral, fungal, bacterial or parasitic infections, cirrhosis, Wilson's
CC   disease, gastrointestinal disorders, pancreatic disorders, gallbladder
CC   diseases, immune disorders, blood related disorders, hyperproliferative
CC   disorders, cardiovascular disorders, respiratory disorders,
CC   musculoskeletal system disorders, neurological diseases, endocrine
CC   disorders, reproductive system disorders or developmental and inherited
CC   disorders. The current sequence is that of the human liver-related
CC   genomic DNA of the invention. The current sequence is not shown within
CC   the specification per se but was obtained electronically from the USPTO
CC   web-site.
XX

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AC   AAK87671;
XX
DT   07-NOV-2001  (first entry)
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DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:42483.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
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PF   17-JAN-2001; 2001WO-US001354.
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XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 42483; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 307 BP; 53 A; 93 C; 69 G; 92 T; 0 U; 0 Other;

Query Match 1.4%; Score 44; DB 4; Length 307;
Best Local Similarity 100.0%; Pred. No. 9.8e-10;
Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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